SONY KVA21MN11

MODEL

SERVICE MANUAL

MC-Service

SPECIFICATIONS

		Note
Power requirements	110-240 V AC, 50/60 Hz	
Power consumption (W)	Indicated on the rear of the TV	
Television system	B/G	
Color system	PAL, PAL 60, NTSC4.43, NTSC3.58 (AV IN)	
Channel coverage	VHF: E2 to E12/UHF: E21 to E69/CATV: S01 to S03, S1 to S41	
Audio output (speaker)	3W × 2	
(antenna)	75 ohms external terminal	
Inputs		
(video input)	phono jacks	
(video)	1 Vp-p, 75 ohms	
(audio)	500 mVrms, high impedance	
Outputs		
(earphone)	minijack	KV-J14P2S
(headphone)	minijack	KV-J51PF2S
(monitor output)	phono jacks	
(video)	1 Vp-p, 75 ohms	
(audio)	500 mVrms	
Picture tube	14 in.	KV-J14P2S
	21 in.	KV-J51PF2S
Tube size (cm)	37 Measured diagonally	KV-J14P2S
	54 Measured diagonally	KV-J51PF2S
Screen size (cm)	34 Measured diagonally	KV-J14P2S
	51 Measured diagonally	KV-J51PF2S
Dimensions (w/h/d, mm)	343 × 456 × 416	KV-J14P2S
	610 × 470 × 474	KV-J51PF2S
Mass (kg)	12	KV-J14P2S
	22	KV-J51PF2S

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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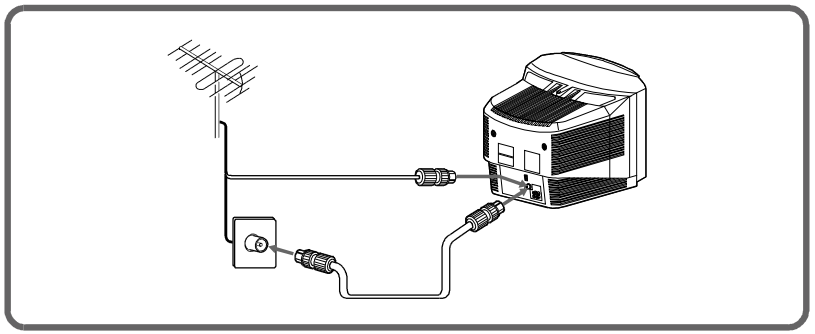
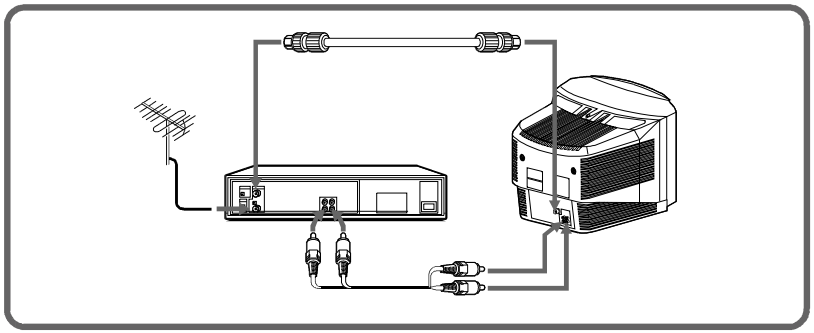
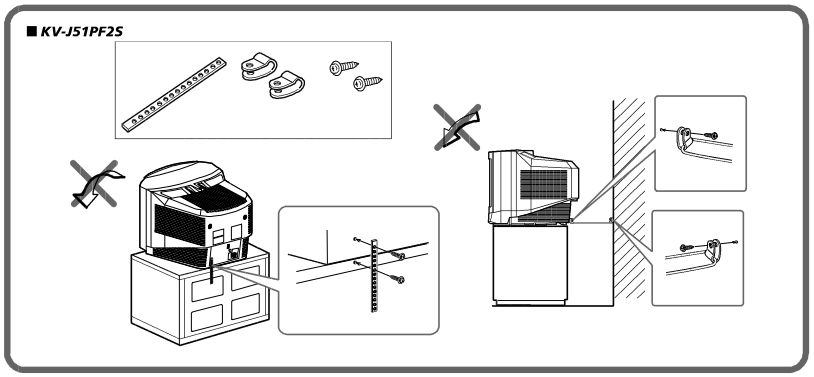
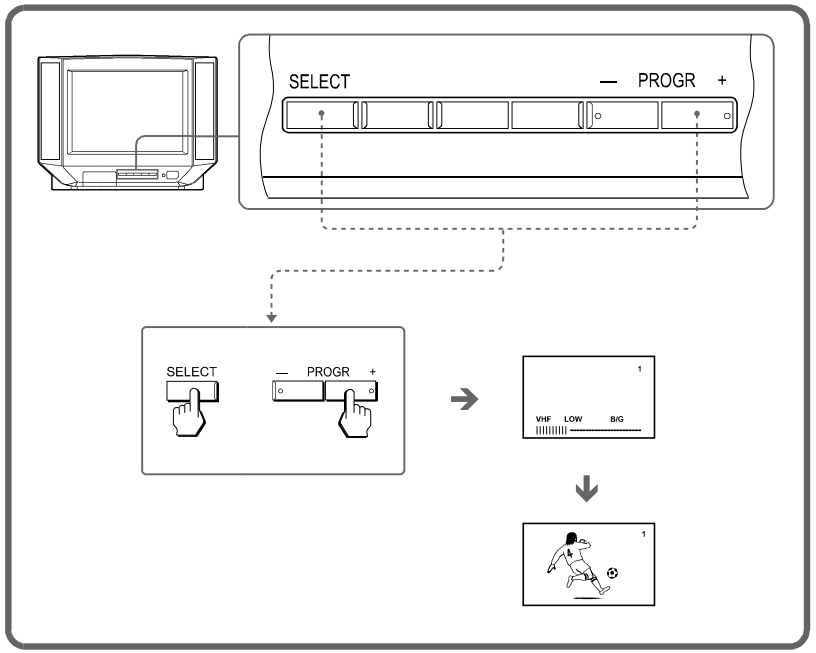
The operating instructions mentioned here are partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in this manual.

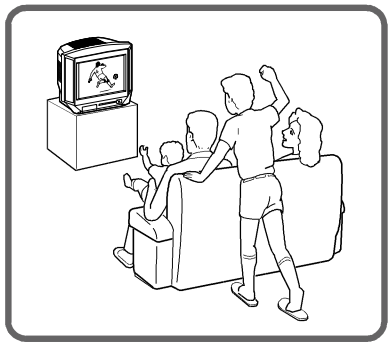
SECTION 1
GENERAL

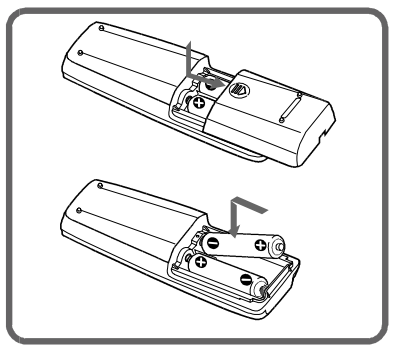








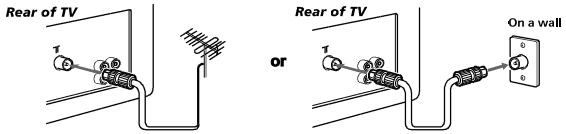




Connections

Connecting a VHF antenna or a combination VHF/UHF antenna — 75-ohm coaxial cable (round)

Attach an optional IEC antenna connector to the 75-ohm coaxial cable. Plug the connector into the Y (antenna) socket at the rear of the TV.

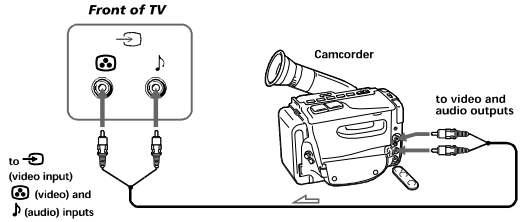


Connecting optional equipment

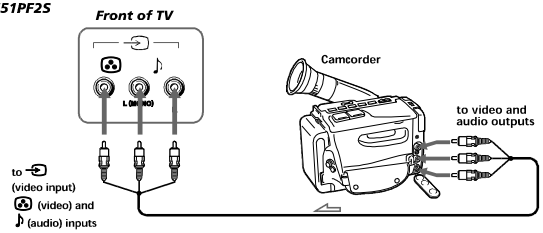
You can connect optional audio/video equipment to your TV such as a VCR, multi disc player, camcorder, or video game.

Connecting video equipment using the (video input) jack

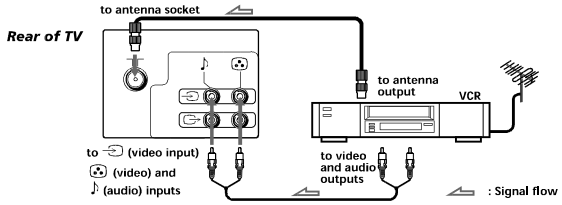
■ *KV-J14P2S*



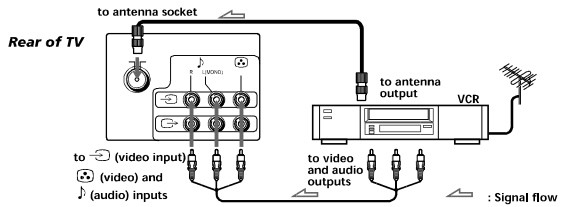
■ *KV-J51PF2S*



■ *KV-J14P2S*



■ *KV-J51PF2S*



When using the (video input) jack

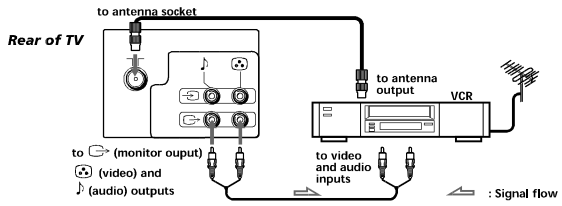
Do not use the (video input) jacks at the front and the rear of your TV simultaneously; otherwise the picture will not be displayed properly on the screen.

When connecting a monaural VCR (for KV-J51PF2S only)

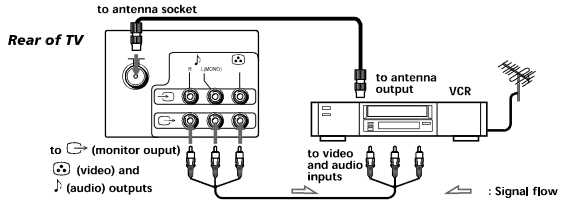
Connect the yellow plug to (video) and the black plug to ♪ – L (MONO).

Connecting audio/video equipment using the (monitor output) jack

■ *KV-J14P2S*



■ *KV-J51PF2S*



When recording through the (monitor output) jack

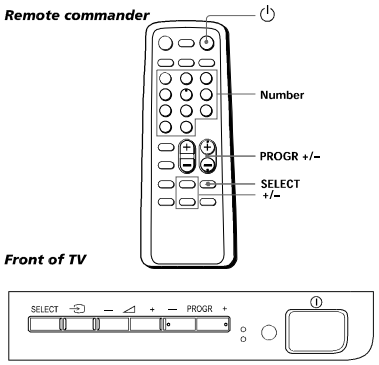
Do not change the channel or video input while recording with a VCR; otherwise the channel or video input you are recording also will be changed.

MC-Service

Presetting channels

You can preset up to 100 TV channels in numerical sequence from program position 1 using the buttons on the remote commander or the TV.

You can preset TV channels quickly, automatically or manually.

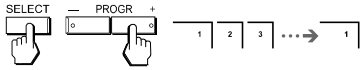


Quick channel presetting

1 Press ⏻ to turn on the TV.

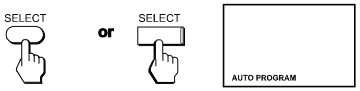
When the TV is turned on in standby mode, press ⏻ on the remote commander.

2 Press SELECT and PROGR + on the TV simultaneously for one to two seconds.

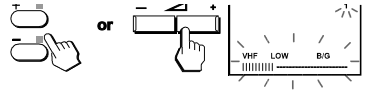


Presetting channels automatically

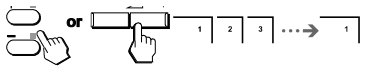
1 Press SELECT on the remote commander or the TV until "AUTO PROGRAM" appears on the screen.



2 Press +/– on the remote commander or ◿ +/– on the TV.

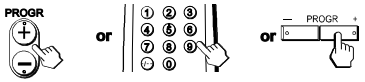


3 Press +/– on the remote commander or ◿ +/– on the TV again.



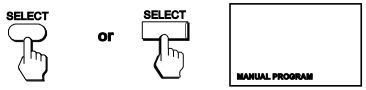
To start presetting channels automatically from a specified program position

Press PROGR +/– or number buttons on the remote commander or PROGR +/– on the TV until the required program position appears on the screen after step 2 of "Presetting channels automatically".

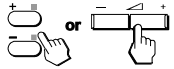


Presetting channels manually

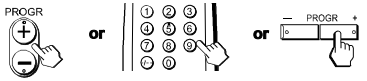
1 Press SELECT on the remote commander or the TV until "MANUAL PROGRAM" appears on the screen.



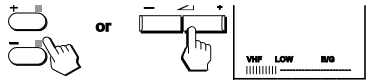
2 Press +/– on the remote commander or ◿ +/– on the TV.



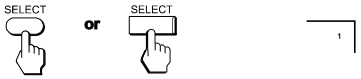
3 Press PROGR +/– or number buttons on the remote commander or PROGR +/– on the TV until the required program position appears on the screen.



4 Press +/– on the remote commander or ◿ +/– on the TV until the required channel picture appears on the screen.



5 Press SELECT on the remote commander or the TV.



Disabling program positions

1 Press PROGR +/– or number buttons on the remote commander or PROGR +/– on the TV until the unused or unwanted program position appears on the screen.

2 Press SELECT on the remote commander or the TV until "MANUAL PROGRAM" appears on the screen.

3 Press +/– on the remote commander or ◿ +/– on the TV.

4 Press PIC MODE on the remote commander.

5 Press SELECT on the remote commander or the TV.

To preset the disabled program position again

Preset the channel quickly, automatically or manually.

Watching the TV

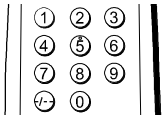
1 Press ⏻ to turn on the TV.

When the TV is turned on in standby mode, press ⏻ on the remote commander.

2 Select the TV program you want to watch.

To select a program position directly

Press the number button.



To select a two-digit program position, press "-/--" before the number buttons.

For example: to select program position 25, press "-/--," and then "2" and "5."

To scan through program positions

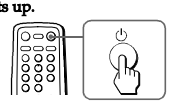
Press PROGR +/– until the program position you want appears.

3 Press ◢ +/– to adjust the volume.

Turning off the TV

To turn off the TV temporarily

Press ⏻ on the remote commander. The ⏻ indicator on the TV lights up.



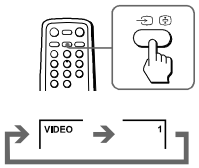
To turn off the TV completely

Press ⏻ on the TV.

If the power on the TV is turned off in standby mode, the ⏻ indicator on the TV may remain alight for a while.

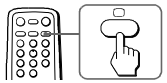
Watching the video input

Press .



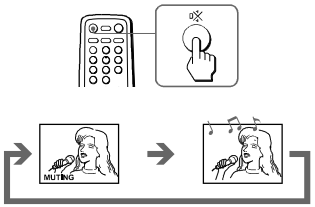
To watch TV

Press .



Muting the sound

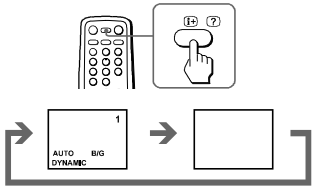
Press .



Displaying on-screen information

Press .

The program position, local system, and TV settings are displayed on the screen.

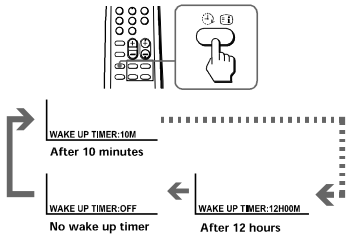


Setting the Wake Up Timer

You can set the TV automatically turned on as you program.

1 Press repeatedly to set the timer.

The on-screen display appears and the indicator on the TV lights up.



2 If you want a particular TV program or video input to be displayed using the Wake Up Timer, select the TV program or video input.

3 Press ⏻ on the remote commander or set the Sleep Timer to turn off the TV in standby mode.

To cancel the Wake Up Timer, press repeatedly until "WAKE UP TIMER: OFF" appears, or turn off the main power of the TV.

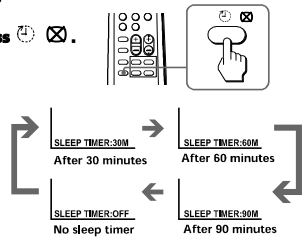
Note

- The Wake Up Timer starts immediately after you have set it.
- The last TV program position or video input just before the TV turns into standby mode will appear when the TV is turned on using the Wake Up Timer.
- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up Timer, the TV automatically turns into standby mode. If you want to continue watching the TV, press any button or control on the TV or remote commander.

Setting the Sleep Timer

You can set the TV automatically turned off as you program.

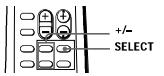
Press .



To cancel the Sleep Timer, press repeatedly until "SLEEP TIMER: OFF" appears, or turn off the TV.

Changing the on-screen display language

You can use buttons on the remote commander or the TV to change the on-screen display language.



1 Press SELECT until the screen appears as follows:

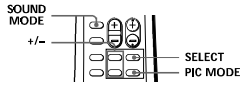
2 Press +/– to select " 中文 ".

Note

- You can also use SELECT and ◢ +/– on the TV to select the on-screen display language.

MC-Service

Adjusting the sound and picture

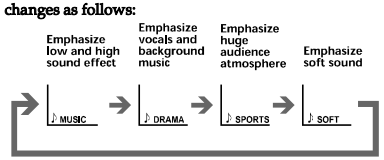


Selecting the sound mode

■ *KV-J51PF2S only*

Press SOUND MODE until the mode you want appears.

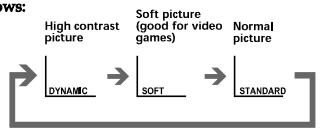
Each time you press SOUND MODE, the screen changes as follows:



Selecting the picture mode

Press PIC MODE until the mode you want appears.

Each time you press PIC MODE, the screen changes as follows:



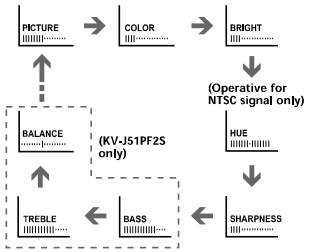
Note

- If you change the picture mode after the following adjustments, the adjustment changes in accordance with the picture mode.

Adjusting the sound and picture settings

1 Press SELECT until the item you want to adjust appears.

Each time you press SELECT, the screen changes as follows:



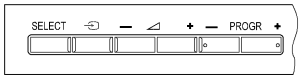
2 Press +/ – to adjust the item.

3 To adjust other items, repeat steps 1 and 2.

Notes

- You can also use SELECT and +/– on the TV to adjust the sound and picture settings.
- The on-screen display for BASS, TREBLE and BALANCE are available for KV-J51PF2S only.

Front of TV



If the picture color is abnormal when receiving programs through the (antenna) terminal

Change the "COLOR SYSTEM" setting or adjust the "COLOR" level in the on-screen display until the color becomes normal.

If the picture color is abnormal when receiving programs through the (video input) jack

Change the "COLOR SYSTEM" setting or adjust the "COLOR" level in the on-screen display until the color becomes normal.

Note

- Normally set "COLOR SYSTEM" to "AUTO".

Troubleshooting

If you have any problems, read this manual again and check the countermeasure for each of the symptoms listed below.

If the problem persists after trying the methods below, contact your nearest authorized service center or dealer.

Snowy picture
Noisy sound

➡Check the antenna.
➡Check the antenna connection on the TV and on the wall.

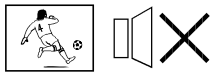
Dotted lines or stripes

➡This may be caused by local interference (e.g. cars, neon signs and hair dryers).
Adjust the antenna for minimum interference.

Double images or "ghosts"

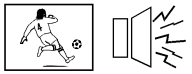
➡This may be caused by reflections from nearby mountains or buildings. A high directional antenna may improve the picture.

Good picture
No sound



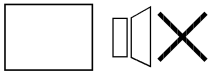
➡Press +.
➡Press .

Good picture
Noisy sound



➡Reduce the TREBLE level or select the "SOFT" sound mode. (KV-J51PF2S only)

No picture
No sound



➡Press or .
➡Check the antenna connection.
➡Check the VCR connections.
➡Check the power cord connection.
➡Check the standby mode.

No color

➡Adjust the COLOR level in the on-screen display.
➡Check the COLOR SYSTEM setting.

TV cabinet creaks

➡Even if the picture or the sound is normal, changes in the room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.

Note on the remote commander

- The supplied remote commander is used on several models of the TV. If you do not find instructions for some controls that are on the remote commander, that means your TV does not employ the features of those controls, e.g. SOUND MODE and .

Notes

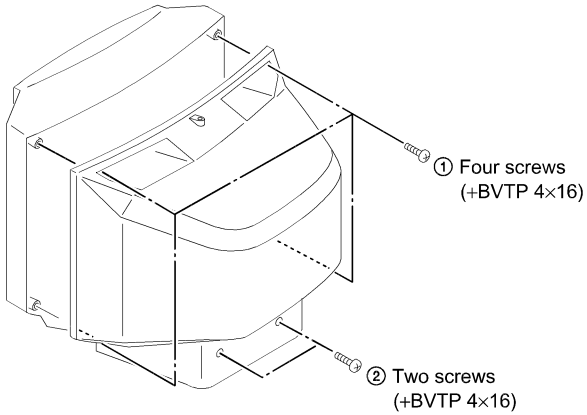
- When you turn on the TV, you may hear the "boom" sound that is caused by the demagnetization of the TV. This does not indicate a malfunction.
- The picture color may become abnormal if you change the direction of your TV. To obtain the normal picture color, press on the TV to turn off the TV for five minutes and then turn it on again.
- The TV illustration of KV-J14 models have been used for illustration purpose in this manual.
- Design and specifications are subject to change without notice.
- All contents in the instruction manual are subject to change without notice.

WARNING

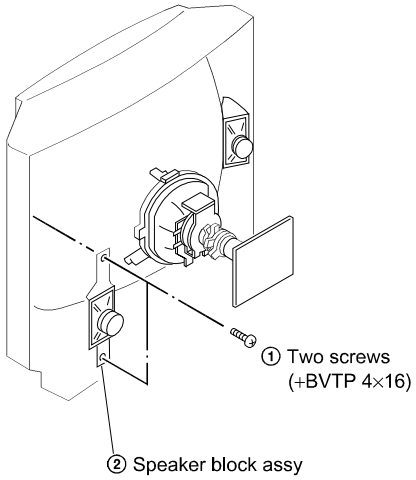
Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

SECTION 2
DISASSEMBLY

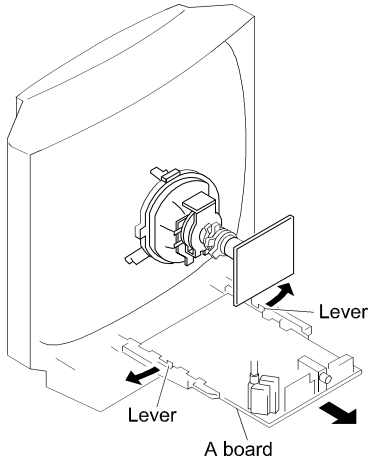
2-1. REAR COVER REMOVAL



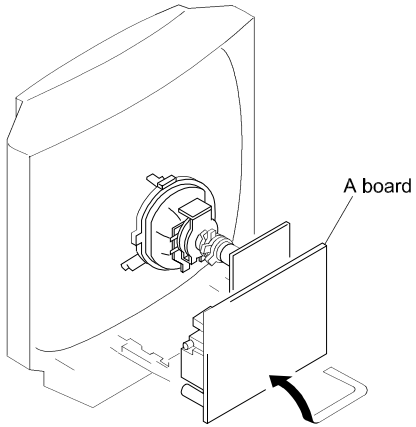
2-2. SPEAKER REMOVAL



2-3. A BOARD REMOVAL



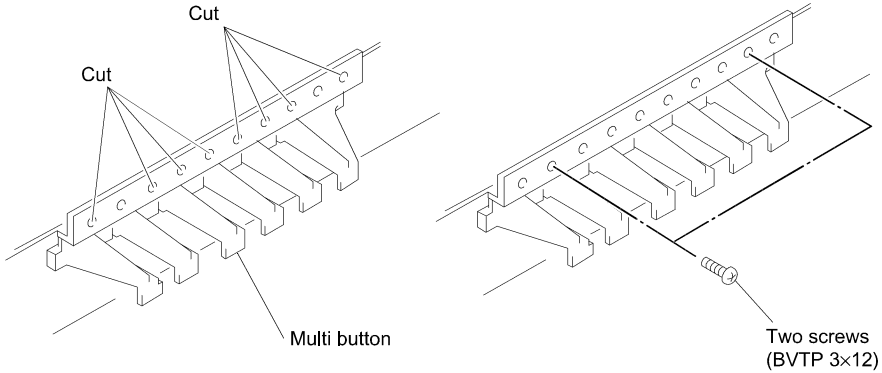
2-4. SERVICE POSITION



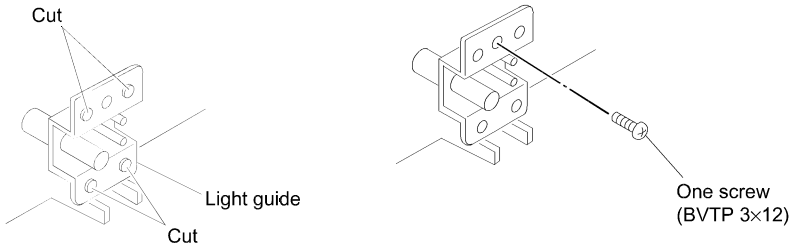
2-5. REPLACEMENT OF PARTS

For replacement of the Multi Button and Light Guide, cut the welded portions from them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

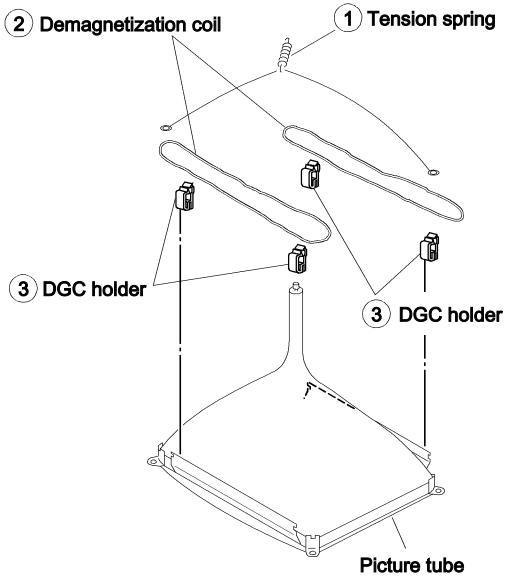
2-5-1. REPLACEMENT OF MULTI BUTTON



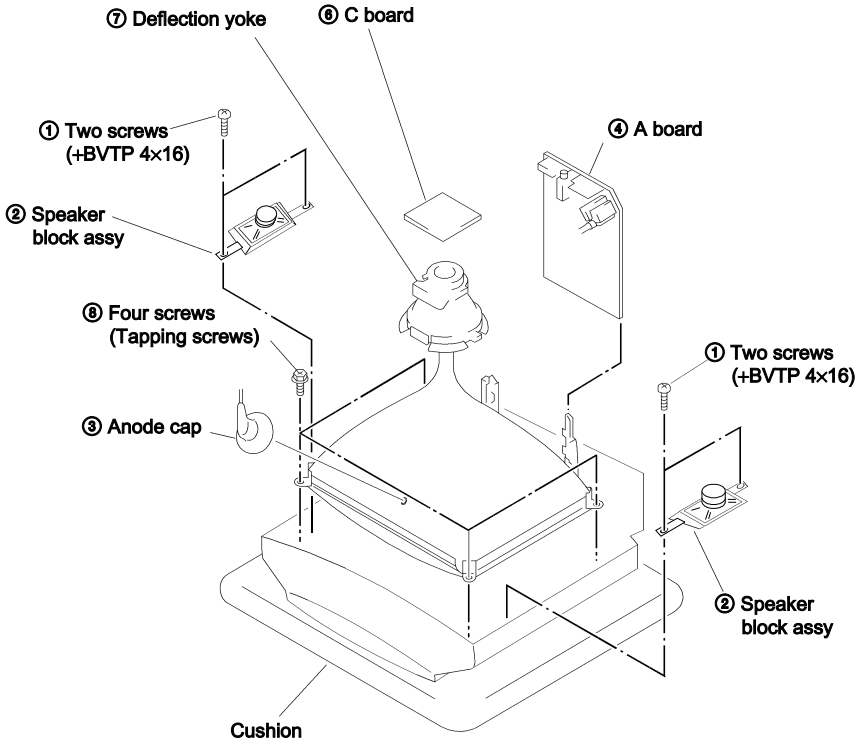
2-5-2. REPLACEMENT OF LIGHT GUIDE



2-6. DEMAGNETIZATION COIL REMOVAL



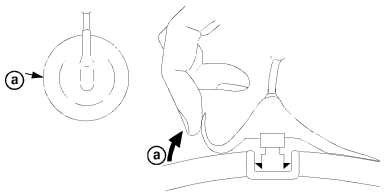
2-7. PICTURE TUBE REMOVAL



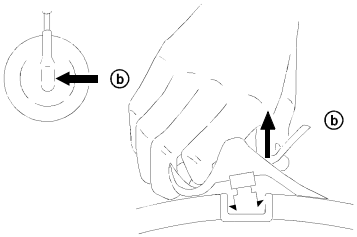
• REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

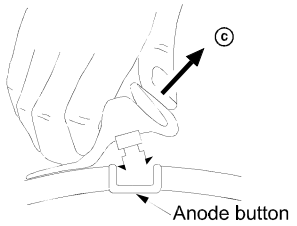
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



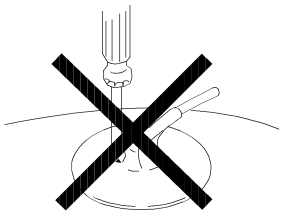
② Using a thumb press down, then pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.

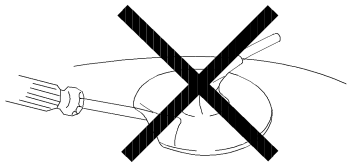


③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.

- **HOW TO HANDLE AN ANODE-CAP**

① Do not damage the surface of anode-cap with sharp shaped objects.
② Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.
③ Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.





SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

PICTURE control ..... normal

BRIGHTNESS control ..... normal

Perform the adjustments in the following order:

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required:

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast, Brightness } normal
2. Set the pattern generator raster signal to green.
3. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
   (See Figures 3-1 through 3-3.)
4. Move the deflection yoke forward and adjust so that entire screen is green. (See Figure 3-1.)
5. Switch the raster signal to blue, then to red and verify the condition.
6. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
7. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Figure 3-4.)

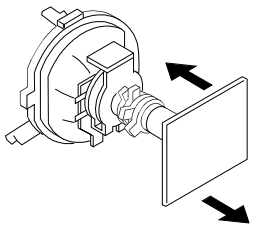


Fig. 3-1

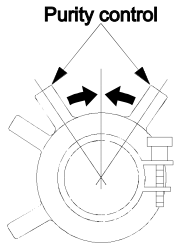


Fig. 3-2

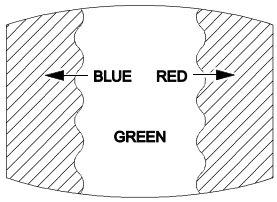


Fig. 3-3

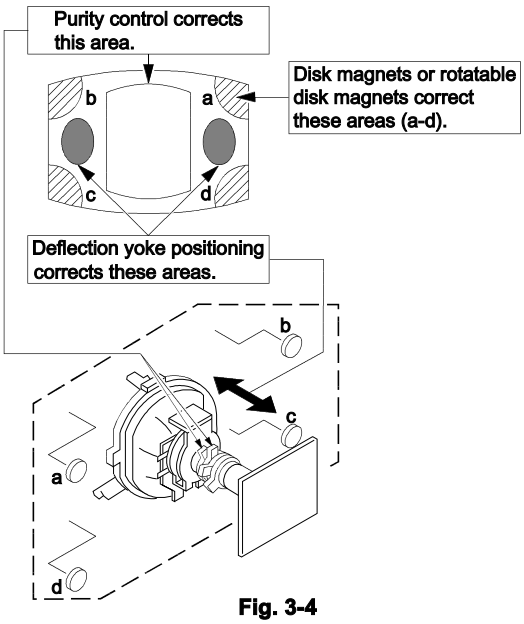


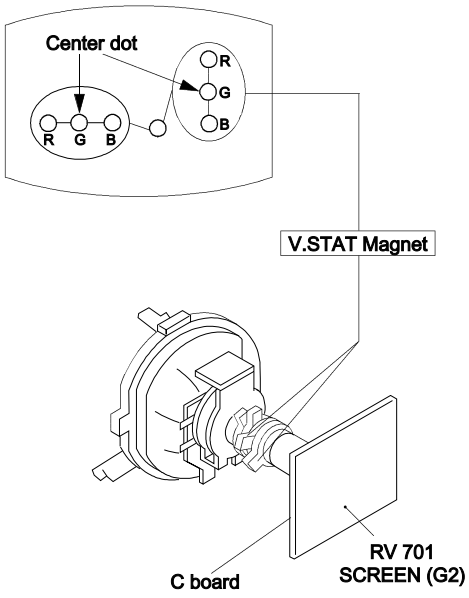
Fig. 3-4

3-2. CONVERGENCE

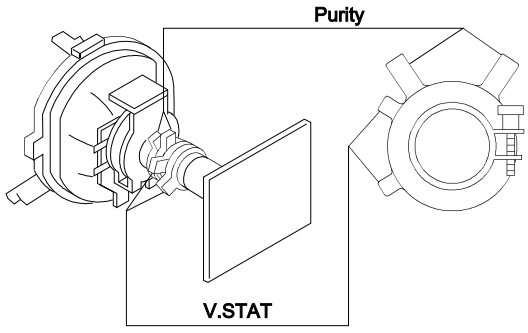
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

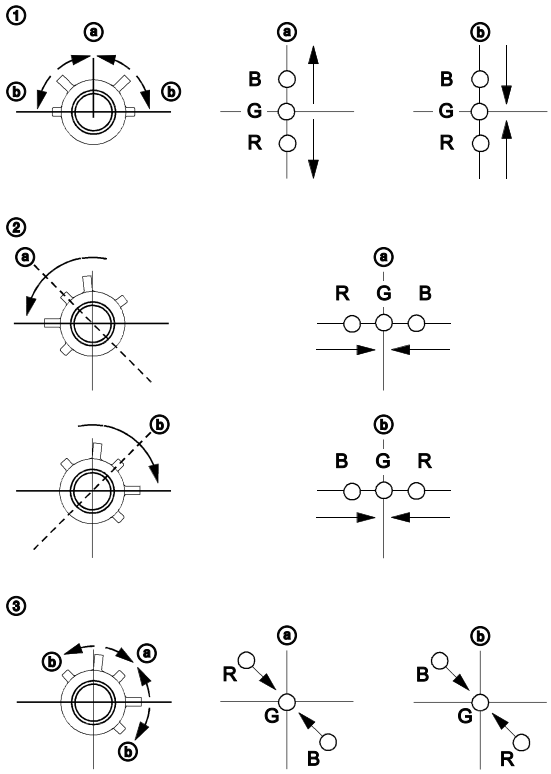
(1) Horizontal and Vertical Static Convergence



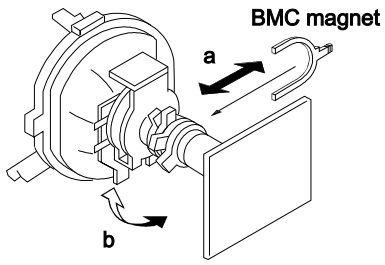
1. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving horizontally), adjust the H.STAT VR so that the red, green and blue dots are on top of each other at the center of the screen.



- Operation of V.STAT magnet.
  If the V.STAT magnet is moved in the direction of the ⓐ and ⓑ arrows, the red, green and blue dots move as shown below.



- Operation of BMC (Hexapole) magnet.
  If the blue or red dot does not converge with the other two dots, perform following steps.
  Move BMC magnet (a) to correct insufficient H.static convergence.
  Rotate BMC magnet (b) to correct insufficient V.static convergence.
  In either case, repeat Beam Landing Adjustment.

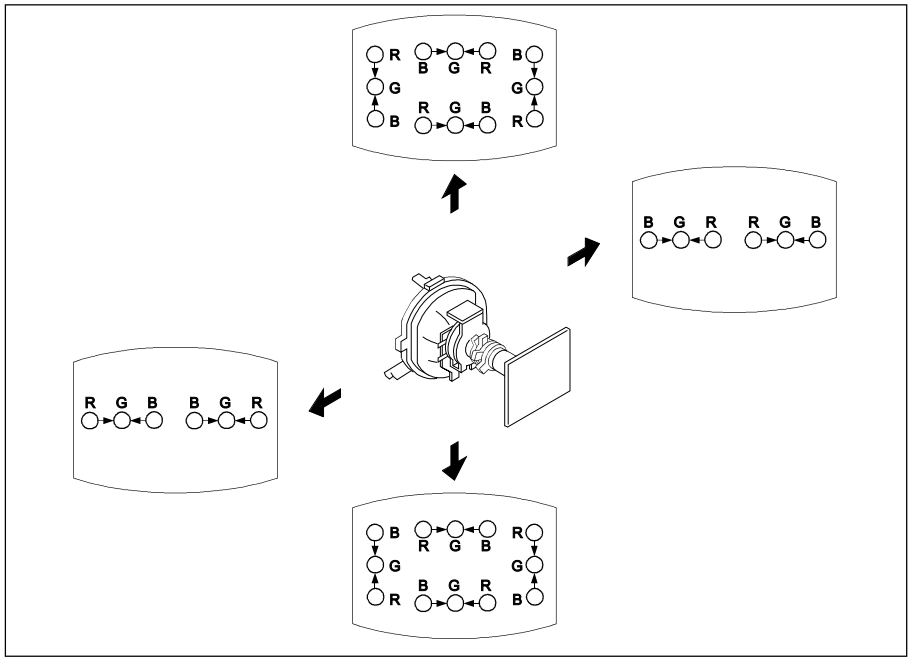


(2) Dynamic Convergence Adjustment

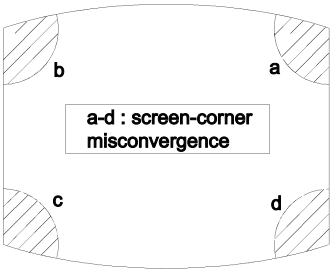
Preparation :

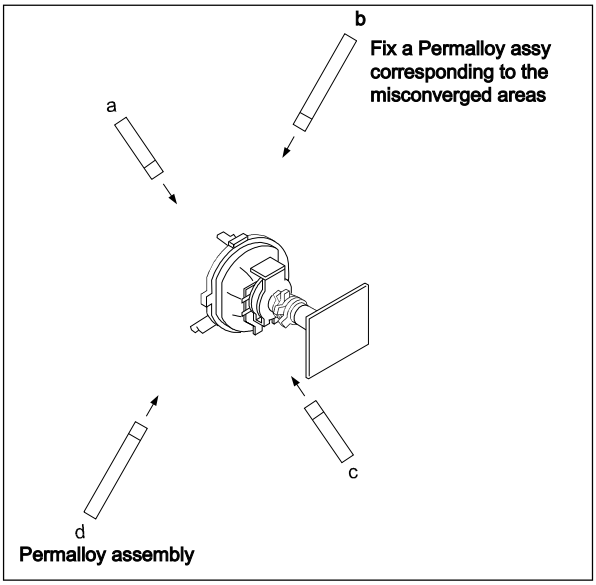
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the deflection yoke spacer.



(3) Screen-corner Convergence





3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the C board (RV703) for the best focus.

3-4. ADJUSTMENT WITH COMMANDER

a. AN ITEM OF ADJUSTMENT

Item number	Adjustment item	Initial DATA	Note
09	RDR	25 (J14P2S)	WHITE POINT R
09	RDR	28 (J51PF2S)	WHITE POINT R
0A	GDR	20	WHITE POINT G
0B	BDR	20	WHITE POINT B

b. METHOD OF CANCELLATION FROM SERVICE MODE

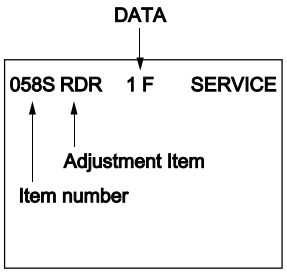
Set the standby condition (Press [POWER] button on the commander) and then press [POWER] button again, hereupon it becomes TV mode.

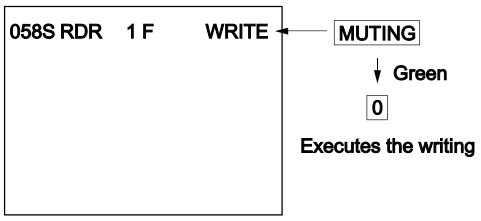
c. METHOD OF WRITE FOR MEMORY

1) Set to Service Mode.
2) Press [1] (UP) and [4] (DOWN) to select an item of adjustments.
3) Press [MUTING] button and it will indicate WRITE on screen.
4) Press [0] button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again, confirm they were adjusted.

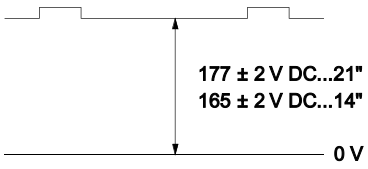




3-5. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT (RV701)

1) Set the PICTURE and BRIGHTNESS to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C board cathode to the oscilloscope.
4) Adjust G2 (RV701) volume to the value below.



2. WHITE BALANCE ADJUSTMENTS

1) Set to Service Mode.
2) Input an entire white signal.
3) Set the PICTURE to maximum.
4) Select RDR(09) with [1] and [4], and then set the level to 25 (KV-J14P2S)/28 (KV-J51PF2S) with [3] and [6].
5) Select GDR(0A) and BDR(0B) with [1] and [4] and adjust the level with [3] and [6] for the best white balance.
6) Write into the memory by pressing [MUTING], then [0].

SECTION 4
SELF DIAGNOSIS FUNCTION

If no acknowledgement is returned from a device which is turned "ON", the device has a problem.
In this case, one of the LED's responding to the problem device will flicker a defined number of times.

Flickering is operated by lighting the LED's for 60ss each time.

The flickering frequency responding to each failed device is shown below.

Device	NONVOLATILE MEMORY (IC003)	—	Y/C JUNGLE (IC300)	—	—	TONE CONTROL (IC201)
Flickering Frequency	1	—	3	—	—	6

All the devices are checked one after another from the left of the table.
If an error is found, the responding LED will start flickering.
So, if more than 1 device have failed, only the one on the left side will flicker.

SECTION 5
CIRCUIT ADJUSTMENTS

5-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-869 that comes with this unit.

Entering service mode

With the unit on standby

↓

DISPLAY

↓

5

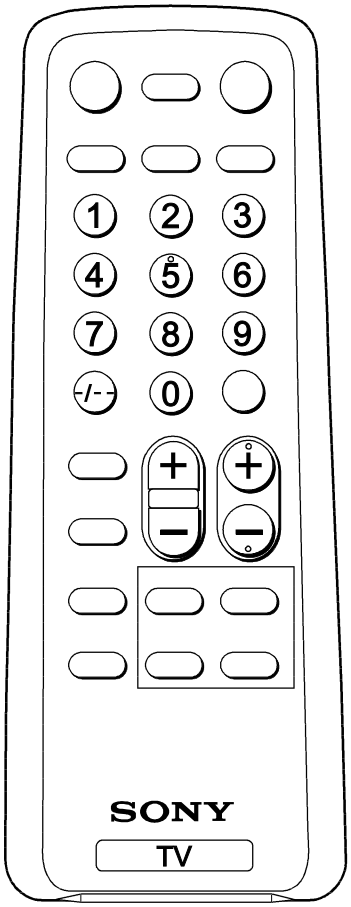
↓

VOL (+)

↓

POWER

The operation sequence puts the unit into service mode.

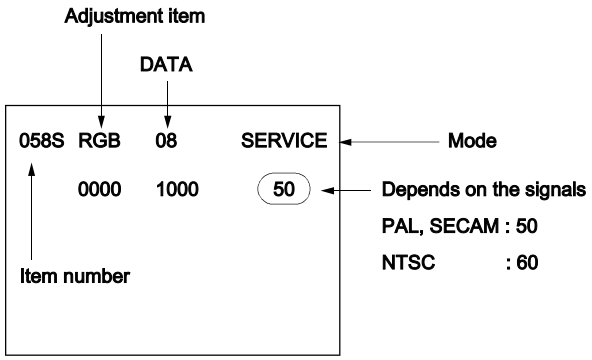


RM-869

1, 4	Raise/lower the service item number
3, 6	Raise/lower the data
MUTING	Writes
0	Executes the writing

7, 0	All data becomes the values in memory
8, 0	All user control goes to the standard state
5, 0	Service data initialization (Be sure not to use usually.)
2, 0	Write 50Hz adjustment data to 60Hz, or viceversa.

The screen display is :



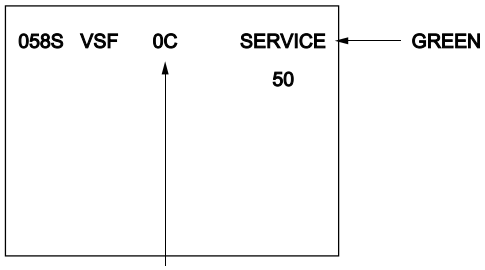
1, 4	Select the adjustment item.
↓	
3, 6	Raise/lower the data.
↓	
MUTING	Writes
↓	
0	Executes the writing.

5-2. ADJUSTMENT METHOD

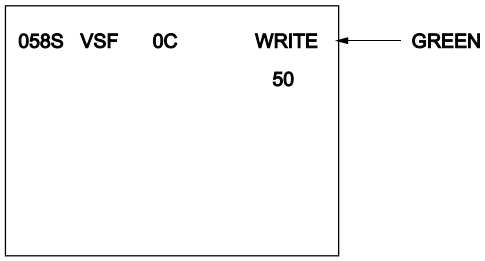
Item Number 08

This explanation uses V-SHIFT as an example.

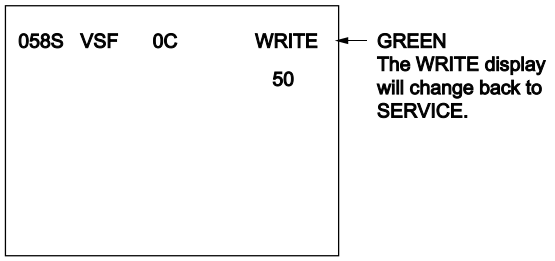
1. Select 08 V-SHIFT with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 0F for PAL reception.)
4. Write with the [MUTING] button.
5. Execute the writing with the [0] button. (The WRITE display returns to green SERVICE.)



Ajust with the [3] and [6] buttons.



Written with the [MUTING].



Write executed with [0] .

Use the same method for Items Number 00-33. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].

Adjustment Item Table (KV-J14P2S)

Item No.	Adj. Item	Data Range	Initial Data	Note for Different Data			Function	Device
00	HSF	00–3F		50: 2C	60: 33		H Shift	TDA8375
01	HSZ	00–3F		50: 35	60: 35		H Size	TDA8375
02	PAP	00–3F		50: 25	60: 25		Pin Amplitude	TDA8375
03	CNP	00–3F		50: 10	60: 0C		Corner Pin	TDA8375
04	TLT	00–3F		50: 20	60: 2D		Tilt	TDA8375
05	VSL	00–3F		50: 1F	60: 1F		V Slope	TDA8375
06	VAP	00–3F		50: 1C	60: 1B		V Amplitude	TDA8375
07	SCR	00–3F		50: 16	60: 16		S Correction	TDA8375
08	VSF	00–3F		50: 10	60: 10		V Shift	TDA8375
09	RDR	00–3F	25				R Drive	TDA8375
0A	GDR	00–3F	20				G Drive	TDA8375
0B	BDR	00–3F	20				B Drive	TDA8375
0C	FO	00–03		TV: 00	VIDEO: 00	TEXT: 00	ø1 TIME CONSTANT	TDA8375
0D	AGC	00–3F		TV: 28	VIDEO: 28	TEXT: 28	AGC Take Over	TDA8375
0E	VSW	00–01		TV: 00	VIDEO: 01	TEXT: 00	Video Mute Switch	TDA8375
0F	FOR	00–03	03				Forced Field Frequency	TDA8375
10	DL	00–01	00				De-interlace	TDA8375
11	POC	00–01	00				Fixed ø1 Synchro. Mode	TDA8375
12	COR	00–01		TV: 01	VIDEO: 00	TEXT: 00	Noise Coring	TDA8375
13	VPX	00–FF	00				Extra Bits (see below)	TDA8375
14	PMX	00–3F	27	TV: 20	VIDEO: 20	TEXT: 20	Picture Maximum Data	TDA8375
15	PMI	00–3F	04				Picture Maximum Data	TDA8375
16	SBR	00–7F	4B				Sub Brightness	TDA8375
17	SHU	00–0F	07				Sub Hue	TDA8375
18	SSH	00–03		TV: 01	VIDEO: 03		Sub Sharpness	TDA8375
19	SC1	00–3F		50: 26	60: 29		Sub Color Lower	TDA8375
1A	SC2	00–3F		50: 0C	60: 0D		Sub Color Higher	TDA8375
1B	AIP	00–7F	3F				Adjustment IF-PLL	TDA8375
1C	VZM	00–3F	19				Vertical Zoom	TDA8375
1D	WST	00–FF	15				W/G Stereo Threshold	MSP3410D
1E	WBT	00–FF	EB				W/G Bilingual Threshold	MSP3410D
1F	WLL	00–FF	05				W/G Monaural Threshold	MSP3410D
20	ACG	00–01	01				ACG Switch auto/constant	MSP3410D
21	CDB	00–3F	28				ACG Gain at Constant Mode	MSP3410D
22	FGP	00–7F	24				FM Prescale for B/G, I. DK	MSP3410D
23	FMP	00–7F	40				FM Prescale for M	MSP3410D
24	FMH	00–7F	20				FM Prescale for HDEV Mode	MSP3410D
25	WGP	00–7F	3C				W/G Prescale	MSP3410D
26	NIP	00–7F	7F				NICAM Prescale	MSP3410D
27	SCP	00–7F	20				SCART Input Prescale	MSP3410D
28	SCV	00–7F	20				SCART Output Prescale	MSP3410D
29	CRM	00–01	00				Carrier Muting on/off	MSP3410D
2A	ACD	00–01	01				Audio Clock-out on/off	MSP3410D
2B	AWC	00–0F	01				W/G Agreement Count	MSP3410D
2C	NFT	00–FF	50				Auto FM Switch Threshold	MSP3410D
2D	DLG	00–FF	30				W/G Search Delay	MSP3410D
2E	DLN	00–FF	10				NICAM Search Delay	MSP3410D
2F	DLS	00–FF	0A				Stereo Status Read Delay	MSP3410D
30	SMX	00–7F	72				DFP Volume Maximum	MSP3410D
31	ING	00–0F		M: 00	non-M: 00	VIDEO: 00	Input Gain	TDA7438
32	VOM	00–3F	01				Volume Output Gain	TDA7438
33	TXH	00–03	01				Teletext Horizontal Position	SAA5261
34	BKP	00–3F	00				Picture Data at Blanking OFF	Other Control
35	ODL	00–FF	10				Power on Delay	Other Control
36	OFR	00–0F	00				RGB Output Time (STBY OFF)	Other Control

MC-Service

Item No.	Adj. Item	Data Range	Initial Data	Note for Different Data	Function	Device
37	OFM	00–0F	00		RGB Output Time (AC OFF)	Other Control
38	OSH	00–3F	0A		OSD H POSITION	Other Control
39	DSK	00–01	00		D/K Stereo enable/disable	TDA8375
3A	MUT	00–01	00		Muting on/off at No. Sync	Other Control
3B	ABL	00–01	00		Bright ABL Switch	Other Control
3C	SCM	00–01	00		SECAM Trap active/inactive	Other Control
3D	FBT	00–01	01		FBT L/S C/M stract/plain	Other Control
3E	OP0	00–FF	4F		Optional Flags 0 (see below)	Other Control
3F	OP1	00–FF	0F		Optional Flags 1 (see below)	Other Control
40	OP2	00–FF	00		Optional Flags 2 (see below)	Other Control

NOTE

- Note for Different Data — Those are the standard data values written on the microprocessor. Therefore, the data values of the modes are stored respectively in the memory.
  In case of a device replacement, adjustment by rewriting the data value is necessary for some items.
- 50 ..... 50 Hz data
- 60 ..... 60 Hz data
- Note for Different Data listed on the adjustment item table are reference values, therefore it is different for every model.

Option Note

Item No. 13 VPX

Item	HCO	EVG	SBL	PRD	–	–	–	VID
Initial data	0	0	0	0	0	0	0	0

HCO EHT Tracking Mode 1 = on V and E–W. 0 = only on V
EVG Enable Vertical Guard 1 = enable. 0 = disable
SBL Service Blanking 1 = active. 0 = inactive
PRD Over-voltage Protection Detection 1 = enable. 0 = disable
VID Video Ident Mode 1 = not for ø1-loop 0 = for ø1-loop

Item No. 3E OP0

Item	No TOP	AV input		AVMUT	B/G	*I	*D/K	*M
Initial data	0	1	0	0	1	1	1	1

AV Input 0 0 no AV input model 0 1 1 AV input model
1 0 2 AV input model 1 1 2 AV input and RGB input model
No TOP (for teletext model) 1 = only FLOF available. 0 = both FLOF and TOP available
AV MUT 1 = AV multi is always muted if no signal input. 0 = not muted always
Other optional bits are effective if set to 1.

Item No. 3F OP1

Item	No NICAM	–	HDEV	1 V-Curve	XTAL SEL		*SECAM	2nd Lang.
Initial data	0	0	0	0	1	1	1	1

XTAL SEL 0 0 only 4.43 XTAL 0 1 only 3.58 XTAL
1 0 (not used) 1 1 both 4.43 and 3.58 XTAL
1 V-Curve (for monaural model)
1 = using common volume curve for every mode and every TV system
0 = another volume curve available for video mode and M system
HDEV 1 = High Deviation Mode switch available. 0 = not available
Other optional bits are effevctive if set to 1.

Item No. 40 OP2

Item	–	–	No. Bal	TV Out	Hotel	VM	D.B.F.B.	*Thai Bil.
Initial data	0	0	0	0	0	0	0	1

No Bal. (for AV stereo model) 1 = no balance in analog select items. 0 = balance included
Other optional bits are effective if set to 1.
Hotel TV mode should be switched with remote commander from STBY condition as below.
Hotel TV on : push “display”. “8”. “vol +” and “power” sequentially
Hotel TV off : push “display”. “8”. “vol –” and “power” sequentially

Adjustment Item Table (KV-J51PF2S)

Item number	Adjustment Item	Data range	Initial data	Standard data	Note	Device
00	HSF	00–3F		50: 2C60: 33 RGB50: 31 RGB60: 38	H Shift	TDA8375
01	HSZ	00–3F		50: 35 60: 35 RGB50: 3A RGB60: 31	H Size	TDA8375
02	PAP	00–3F		50: 25 60: 25	Pin Amplitude	TDA8375
03	CNP	00–3F		50: 10 60: 0C	Corner Pin	TDA8375
04	TLT	00–3F		50: 20 60: 2D	Tilt	TDA8375
05	VSL	00–3F		50: 1F 60: 1F	V Slope	TDA8375
06	VAP	00–3F		50: 1C 60: 1B	V Amplitude	TDA8375
07	SCR	00–3F		50: 16 60: 16	S Correction	TDA8375
08	VSF	00–3F		50: 10 60: 10	V Shift	TDA8375
09	RDR	00–3F	28		R Drive	TDA8375
0A	GDR	00–3F	20		G Drive	TDA8375
0B	BDR	00–3F	20		B Drive	TDA8375
0C	FO	00–03		TV: 00 VIDEO: 00 TEXT: 01	ø1 Time Constant	TDA8375
0D	AGC	00–3F		TV: 28 VIDEO: 28 TEXT: 28	AGC Take Over	TDA8375
0E	VSW	00–01		TV: 00 VIDEO: 01 TEXT: 00	Video Mute Switch	TDA8375
0F	FOR	00–03	03		Forced Field Frequency	TDA8375
10	DL	00–01	00		De-interlace	TDA8375
11	POC	00–01	00		Fixed ø1 Synchro. Mode	TDA8375
12	COR	00–01		TV: 00 VIDEO: 00 TEXT: 00	Noice Coring	TDA8375
13	VPX	00–FF	00		Extra Bits (see below)	TDA8375
14	PMX	00–3F	27	TV: 2B VIDEO: 2B TEXT: 2B	Picture Maximum Data	TDA8375
15	PMI	00–3F	04		Picture Maximum Data	TDA8375
16	SBR	00–7F	4B		Sub Brigthness	TDA8375
17	SHU	00–7F	07		Sub Hue	TDA8375
18	SSH	00–0F		TV: 01 VIDEO: 03	Sub Sharpness	TDA8375
19	SC1	00–03		50: 26 60: 29	Sub Color Lower	TDA8375
1A	SC2	00–3F		50: 0C 60: 0D	Sub Color Higher	TDA8375
1B	AIP	00–7F	3F		Adjustment IF-PLL	TDA8375
1C	VZM	00–3F	19		Vertical Zoom	TDA8375
1D	WST	00–FF	15		W/G Stereo Threshold	MSP3410
1E	WBT	00–FF	EA		W/G Bilingual Threshold	MSP3410
1F	WLL	00–FF	05		W/G Monaural Threshold	MSP3410
20	ACG	00–01	01		ACG Switch auto/constant	MSP3410
21	CDB	00–3F	28		ACG Gain at Constant Mode	MSP3410
22	FGP	00–7F	1B		FM Prescale for B/G, I. DK	MSP3410
23	FMP	00–7F	32		FM Prescale for M	MSP3410
24	FMH	00–7F	36		FM Prescale for HDEV (non-M)	MSP3410
25	FMM	00–7F	65		FM Prescale for HDEV (M)	MSP3410
26	WGP	00–7F	2A		W/G Prescale	MSP3410
27	NIP	00–7F	6D		NICAM Prescale	MSP3410
28	SCP	00–71	3B		SCART Input Prescale	MSP3410
29	SCV	00–7F	2A		SCART Output Prescale	MSP3410
2A	CRM	00–01	00		Carrier Muting on/off	MSP3410
2B	ACO	00–01	01		Audio Clock-out on/off	MSP3410
2C	WAC	00–0F	00		W/G Agreement Count	MSP3410
2D	NFT	00–7F	50		Auto FM Switch Threshold	MSP3410
2E	DLG	00–FF	30		W/G Search Delay	MSP3410
2F	DLN	00–FF	20		NICAM Search Delay	MSP3410
30	DLS	00–FF	10		Stereo Status Read Delay	MSP3410
31	SMX	00–7F	78		DFP Volume Maximum	MSP3410
32	ING	00–0F	00	M: 00 non-M: 00 VIDEO: 00	Input Gain	TDA8375
33	VOM	00–3F	01	M system only	Volume Output Gain	TDA8375
34	TXP	00–0F	07		Teletext Horizontal Position	SAA5281
35	BKP	00–0F	0A		Picture Data at Blanking OFF	Other Control
36	ODL	00–3F	00		Power on Delay	Other Control
37	OFR	00–3F	25		RGB Output Time (STBY OFF)	Other Control
38	OFM	00–0F	00		RGB Output Time (AC OFF)	Other Control
39	OSH	00–3F	0A		OSD H POSITION	Other Control

Item number	Adjustment Item	Data range	Initial data	Standard data	Note	Device
3A	DKS	00–01	01		D/K Stereo enable/disable	Other Control
3B	MUT	00–01	00		Muting on/off at No. Sync	Other Control
3C	ABL	00–01	00		Bright ABL Switch	Other Control
3D	SCM	00–01	00		SECAM Trap active/inactive	Other Control
3E	FBT	00–01	01		FBT L/S C/M strict/plain	Other Control
3F	OP0	00–FF	2F		Optional Flags 0 (see below)	Other Control
40	OP1	00–FF	0F		Optional Flags 1 (see below)	Other Control
41	OP2	00–FF	00		Optional Flags 2 (see below)	Other Control

NOTE

- Standard Data: Those are the standard data values written on the microprocessor. Therefore, the data values of the modes are stored respectively in the memory.
  In case of a device replacement, adjustment by rewriting the data value is necessary for some items.
- 50 ..... 50 Hz data
- 60 ..... 60 Hz data
- Standard data listed on the adjustment item table are reference values, therefore it is different for every model.

ITEM INFORMATION

- 10. DL: TV/MIX Mode 0=Interlace 1=Non interlace, TEXT Mode 0=Non interlace 1=Interlace
- 42. ABL: Bright ABL ON/OFF ON=1 OFF=0
- 49. OP0, • 4A. OP1, • 4B. OP2:
  Input data are different according to models.

No. 49 OP0

Item	No Top	AV Input		AVMUT	B/G	I	D/K	M
KV-J14P2S	0	0	1	1	1	0	0	0
KV-J51PF2S	0	0	1	1	1	0	0	0

No. 4A OP1

Item	No Nicam	–	H DEV	1 V-Curve		XTAL Select	SECAM	2nd Language
KV-J14P2S	0	0	0	0	1	1	0	1
KV-J51PF2S	0	0	0	0	1	1	0	1

No. 4B OP2

Item	–	–	No. Bal	TV Out	Hotel	VM	DBFB	Thai Bilingual
KV-J14P2S	0	0	0	0	0	1	0	1
KV-J51PF2S	0	0	0	0	0	0	0	0

5-3. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.

2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.

3. Call each item number, and check if the respective screen shows the normal picture.
   In case some items are not well-adjusted, give them fine adjustment.
   Write the data per each item number ([MUTING] + [0]).

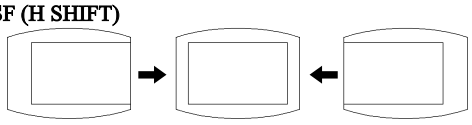
4. Select item numbers "31" (OP0), "32" (OP1) and "33" (OP2) and respectively set the bit per model with command buttons [3] and [6].

5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory.
   (= Cancel Service Mode.)

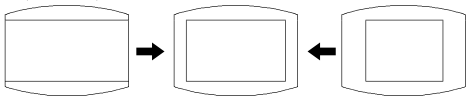
5-4. PICTURE DISTORTION ADJUSTMENT

Item Number 00 – 08

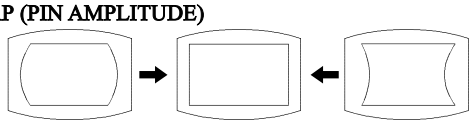
00 HSF (H SHIFT)



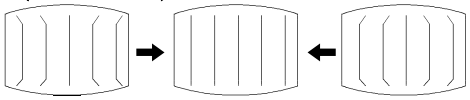
01 HSZ (H SIZE)



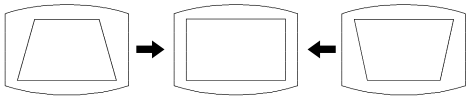
02 PAP (PIN AMPLITUDE)



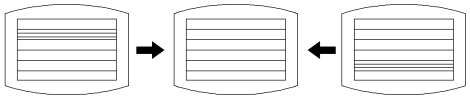
03 CNP (CORNER PIN)



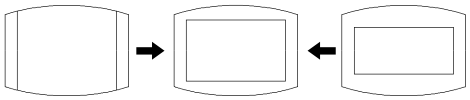
04 TLT (TILT)



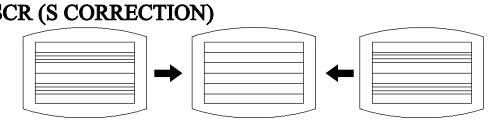
05 VSL (V SLOPE)



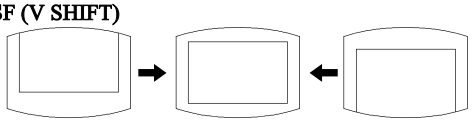
06 VAP (V AMPLITUDE)



07 SCR (S CORRECTION)



08 VSF (V SHIFT)

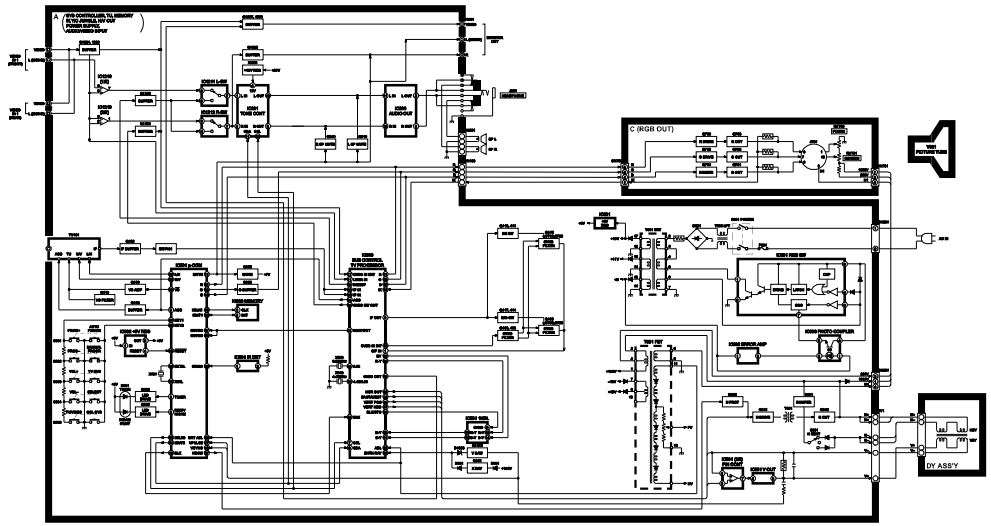


Note) 01 HSZ, 02 PAP, 03 CNP and 04 TLT are not adjustable for this model.

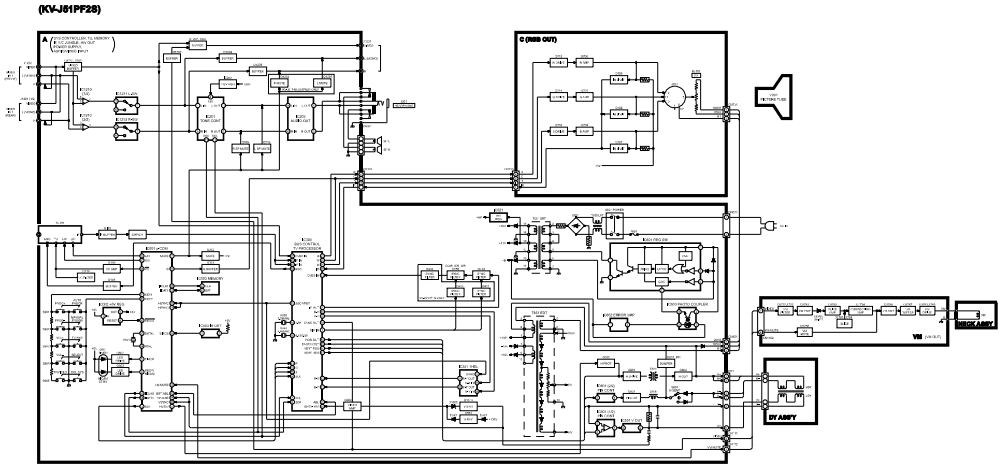
SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAM

(KV-J14P28)

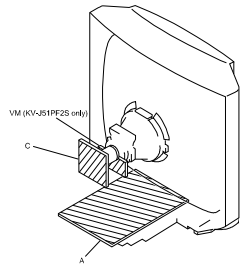


(KV-J51PF28)



MC-Service

6-2. CIRCUIT BOARDS LOCATION



6-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

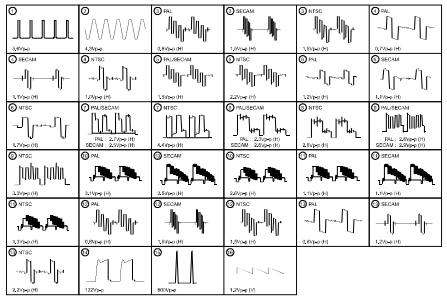
Note:

- All capacitors are in µF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000kΩ
- Indication of resistance which does not have rating electrical power is as follows.
  Pitch: 5 mm
  Rating electrical power 1/4W (CHIP: 1/10W)
- : nonflammable resistor.
- : Internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.
- Readings are taken with a color-bar signal input.
  no mark : PAL
  ( ) : SECAM
  [ ] : NTSC 3.58
  ≪ ≫ : NTSC 4.43
- Readings are taken with a 10Ω MW digital multimeter.
- Voltage is dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- : Cannot be measured.
- Circled numbers are waveform reference.
- : B + bus.
- : B − bus.
- : signal path.

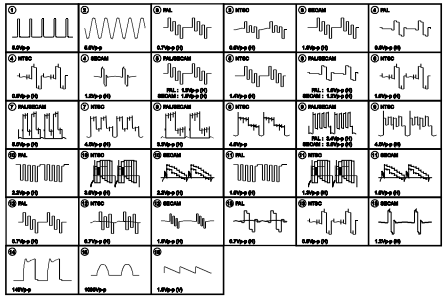
Reference	Information	
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: VR	ADJUSTMENT RESISTOR
COIL	: LF-SL	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The component identified by shading and mark Δ are critical for safety. Replace only with part number specified.

A BOARD WAVEFORMS (KV-J14P2S)



A BOARD WAVEFORMS (KV-J51PF2S)



A BOARD

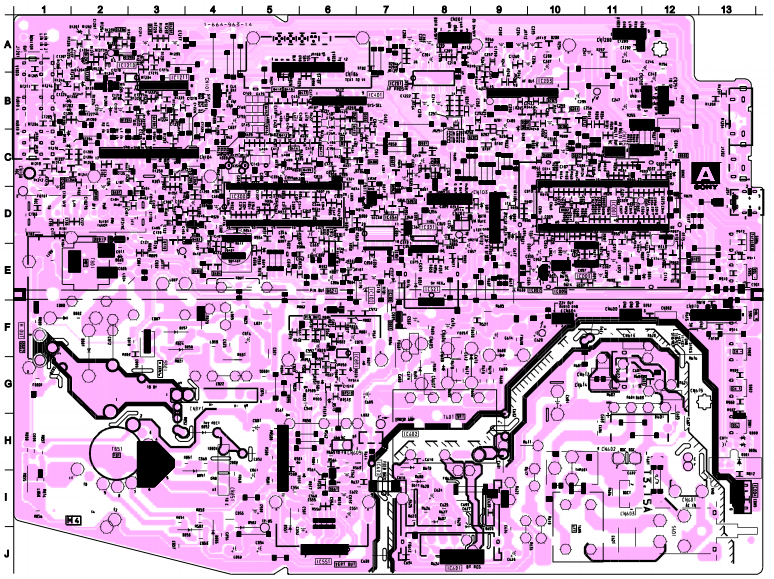
IC			
IC001	D-11	Q903	D-11
IC002	E-10	Q1201	A-3
IC003	E-10	Q1202	A-3
IC004	L-13	Q1203	A-2
IC005	E-10	Q1204	B-2
IC100	E-7	Q1205	B-3
IC102	E-7	Q1206	A-2
IC201	B-7	Q1209	C-4
IC203	B-10	Q1264	C-1
IC300	B-4	Q1265	C-1
IC351	D-8	Q1513	G-6
IC401	B-7		
IC521	E-8	**DIODE**	
IC551	J-6		
IC601	J-8	D001	D-9
IC602	H-7	D002	C-12
IC603	H-7	D003	C-11
IC801	G-8	D004	E-12
IC1210	A-2	D005	E-8
IC1211	B-3	D006	H-13
		D008	H-13
TRANSISTOR		D101	C-9
		D102	C-9
Q001	F-7	D103	D-1
Q002	C-10	D200	A-10
Q030	C-10	D201	B-9
Q031	C-8	D202	C-9
Q108	D-2	D207	B-10
Q109	E-12	D209	B-9
Q110	E-3	D251	B-8
Q201	B-10	D252	F-12
Q202	C-9	D253	C-9
Q207	B-10	D300	D-4
Q208	B-10	D301	D-8
Q209	B-9	D302	C-8
Q212	B-11	D304	C-8
Q300	C-10	D305	D-8
Q301	C-7	D306	E-5
Q302	C-7	D307	D-5
Q303	D-7	D308	C-10
Q401	D-2	D309	D-6
Q402	D-4	D310	D-9
Q403	E-4	D311	D-9
Q404	E-4	D315	E-5
Q405	C-8	D351	E-8
Q406	B-7	D398	E-5
Q407	B-6	D401	E-4
Q408	C-7	D402	C-6
Q409	C-6	D403	C-9
Q410	B-6	D513	G-6
Q411	C-8	D551	J-5
Q412	C-5	D561	G-5
Q413	B-5	D562	F-5
Q414	C-5	D581	H-5
Q415	B-5	D582	I-5
Q416	B-5	D591	I-5
Q417	B-6	D600	F-9
Q418	B-5	D601	H-12
Q551	I-8	D602	G-11
Q601	G-12	D603	G-11
Q801	D-2	D804	G-7
Q802	F-1	D805	G-8
Q821	E-8	D806	G-9
Q902	D-10	D807	I-8
		D610	F-8
		D611	I-7
		D613	E-9
		D614	E-10
		D615	E-10
		D801	F-2
		D802	F-2
		D803	D-9
		D820	G-8
		D821	G-7
		D851	I-4
		D852	H-4
		D853	J-3
		D855	J-4
		D857	F-3
		D858	F-4
		D880	E-2
		D901	H-13
		D1201	A-2
		D1202	B-1
		D1203	B-2
		D1204	A-2
		D1205	C-1
		D1207	B-2
		D1208	B-2
		D1209	B-3
		D1504	G-8
		D1505	G-8

PRINTED WIRING BOARD

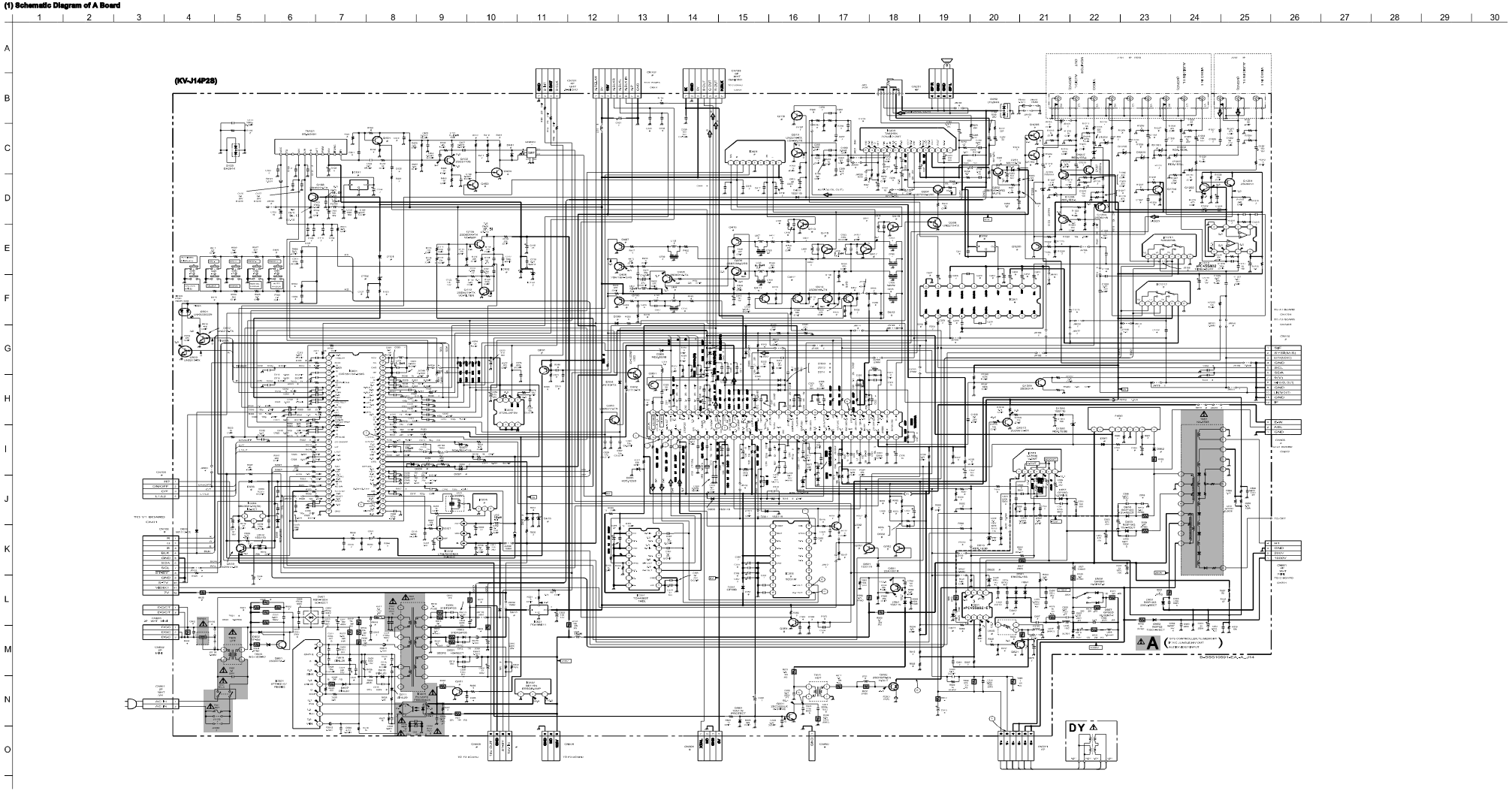
A [SYSTEM CONTROLLER, Y/C JUNGLE, DEFLECTION, TUV/F, FRONT AMP, POWER SUPPLY]

NOTE:
The circuit indicated at left contains high voltage of over 600 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.

– A Board –



(1) Schematic Diagram of A Board



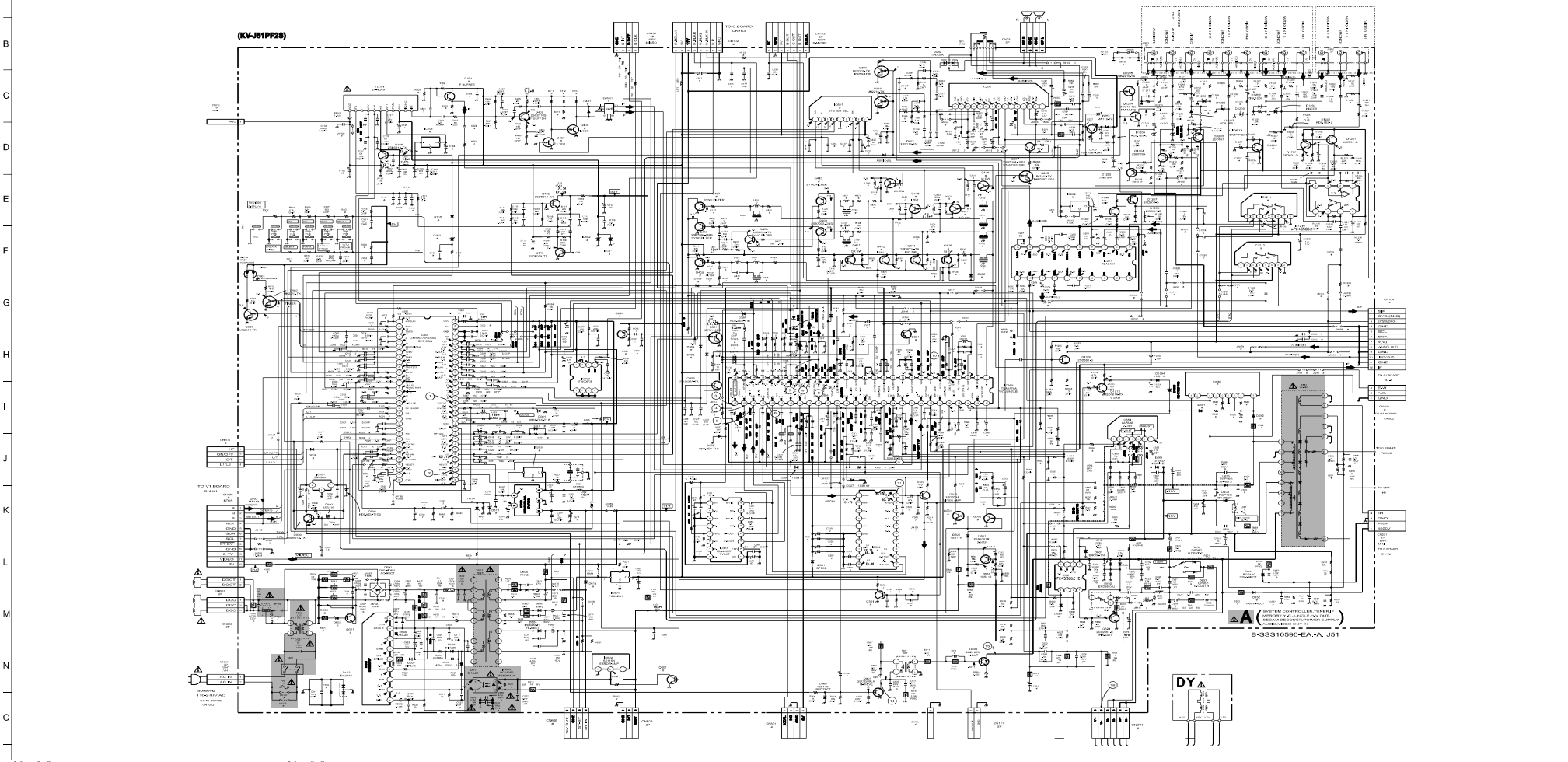
– 35 –

– 36 –

– 37 –

– 38 –

(2) Schematic Diagram of A Board



Schematic diagram
A board (KV-J14P28)

– 39 –

Schematic diagram
A board (KV-J51PF28)

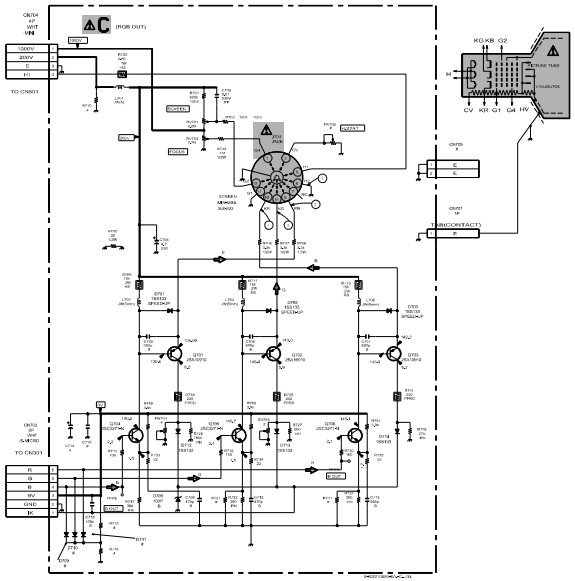
– 40 –

– 41 –

– 42 –

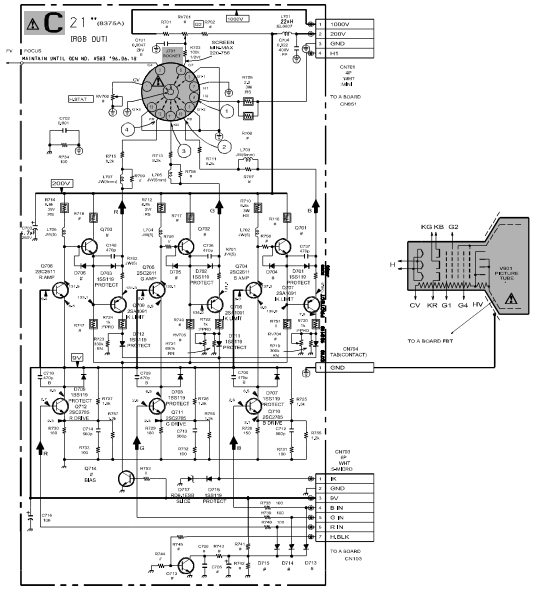
(3) Schematic Diagrame of C and VM Boards

(KV-J14P28)



– 43 –

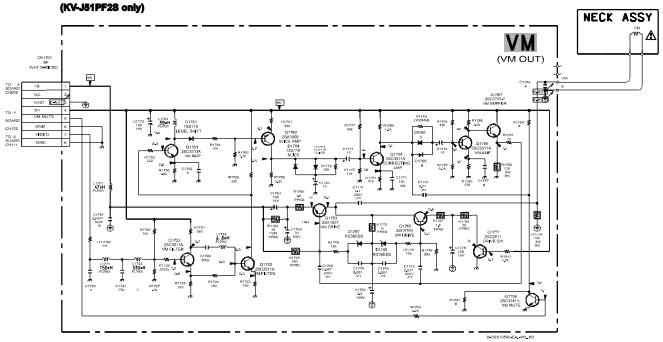
(KV-J51PF28)



– 44 –

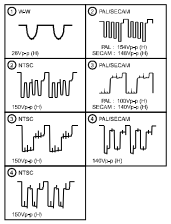
– 45 –

(KV-J51PF28 only)

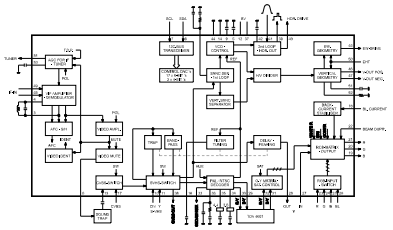


– 46 –

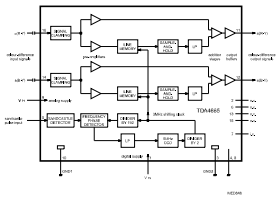
C BOARD WAVEFORMS



A Board IC300 TDA8374A (KV-J14P2S)
A Board IC300 TDA8375A (KV-J51PF2S)



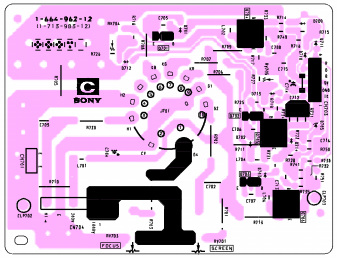
A Board IC351 TDA4665T-T/ V5-118



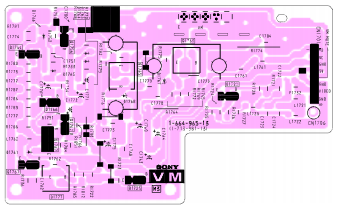
PRINTED WIRING BOARDS

C [RGB OUT, DEFLECTION] VM [VM OUT]

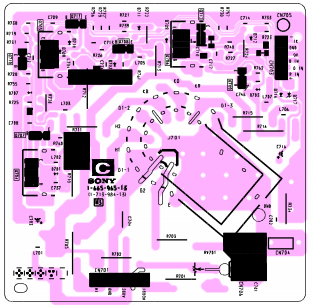
– C Board – (KV-J14P2S)



– VM Board – (KV-J51PF2S)



– C Board – (KV-J51PF2S)

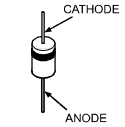


MC-Service

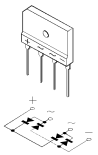
6-4. SEMICONDUCTORS

DIODE

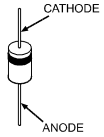
DINL20-TA
EL1Z
EGP20G
GP08D
NNCD8.2A-T1
NNCD9.1A-T1
RGP02-17EL-6433



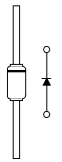
D4SB60L



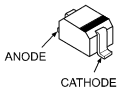
ERC06-15S
RN4Z
RU4AM-T4
S3L20UF4



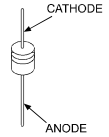
RD9.1ES-L2



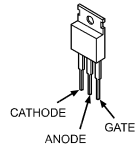
DTZ9-1
MA113-(TX)
1SS355TE-17



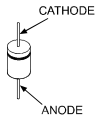
RD2.2ES-B2
RD3.6ES-B1
RD4.7ES-B2
RD5.1ES-B1
RD5.6ES-B2
RD13ES-B2
RD39ES-B2
1SS119-25



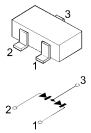
5P6M



RU4DS



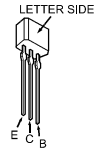
DA204K



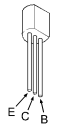
TRANSISTOR

UN2211
UN2213
UN2216
2SA1162-G
2SD601A-Q

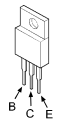
2SA1175-HFE
2SC2785-HFE
2SC2410SN
2SC3311A-QRSTA



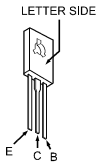
2SA1091-0



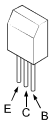
2SA1837
2SC4793
2SD2012
2SD1877S-SONY-CA



2SC2611

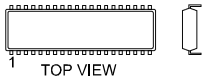


2SC3733
2SC3209LK



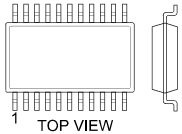
IC

CXP85220A-058S (64PIN)
ST24C04FB6 (8 PIN)
TDA8374A (56 PIN)
TDA4665T/V5-118



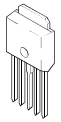
Dual In-line Package
Pin 6~98

TDA7315D013TR (20PIN)
µPC4558G2 (8PIN)

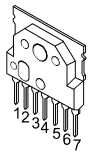


Single In -line Package
Pin 6~98

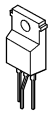
L78LR05D-MA



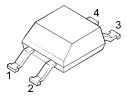
LA7830



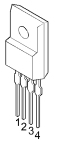
SE115



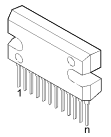
PC123F2



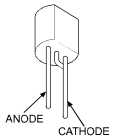
PQ09RE11



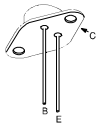
TA8248K



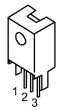
UPC574J



2SD2578-CA



SBX3081-01(30)



NJM2234L
STR-S6707N

Zig-zag In -line Package
Pin 6~99

MC-Service

SECTION 7
EXPLODED VIEW

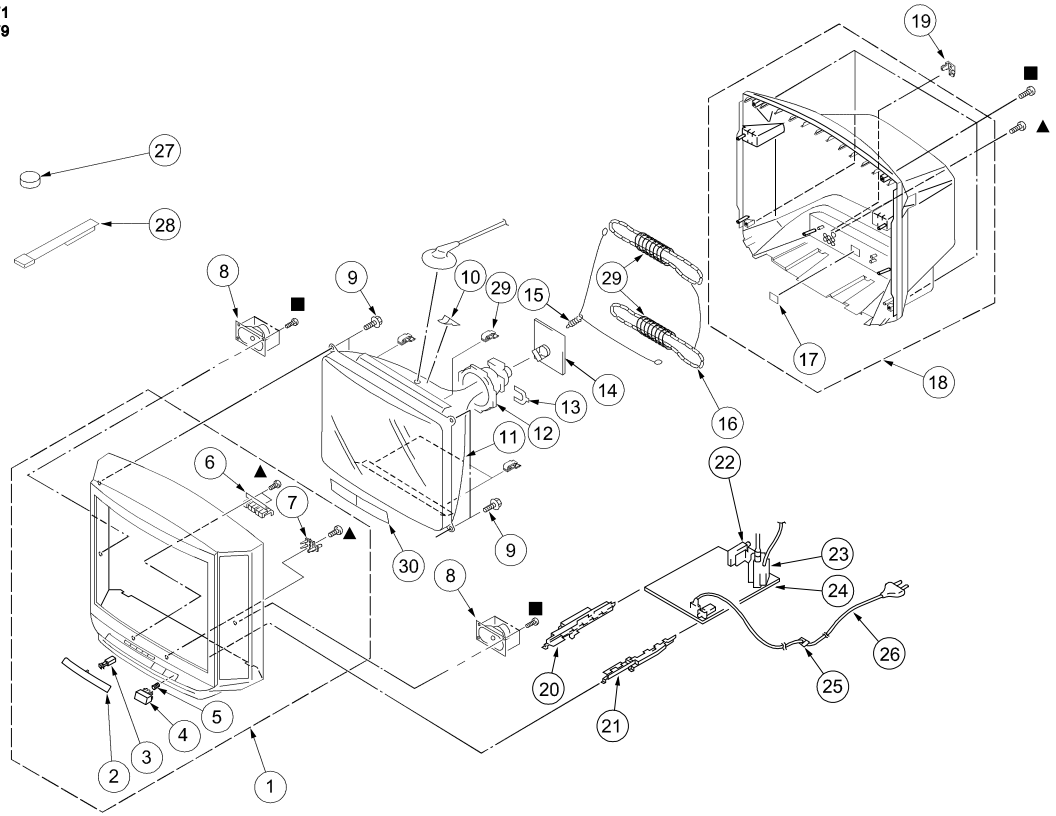
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

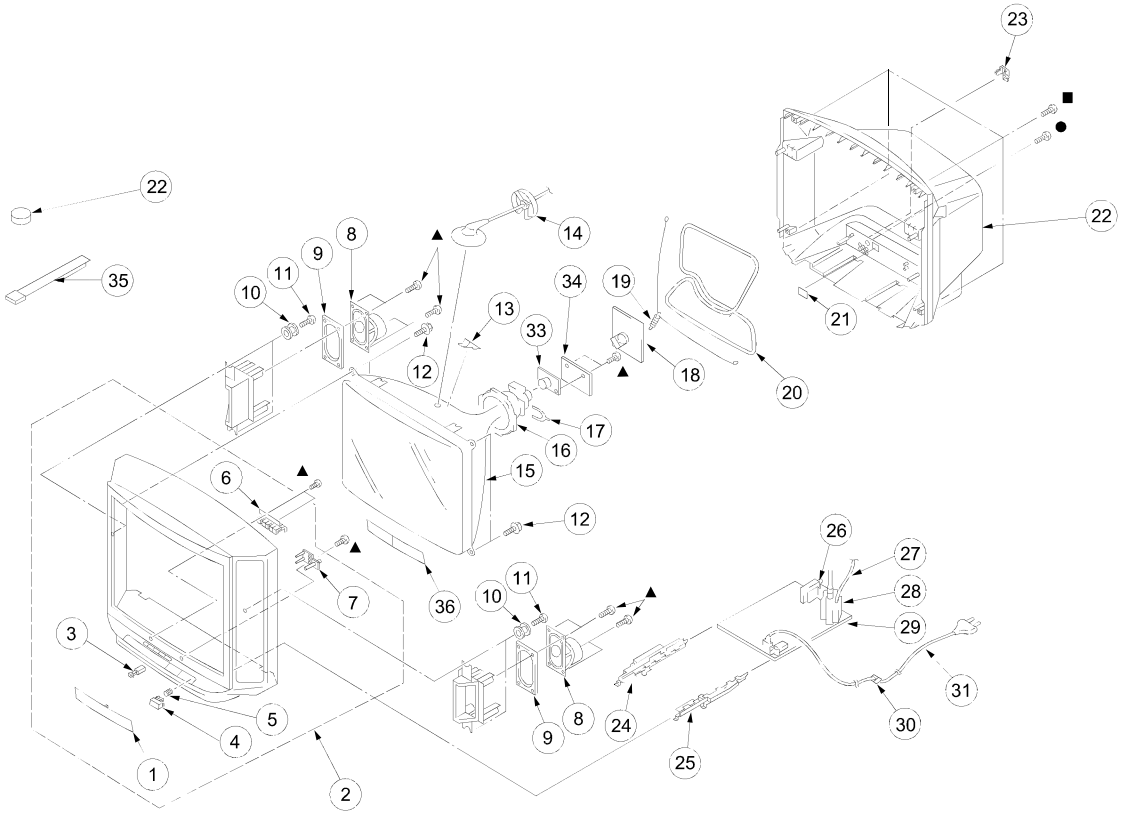
7-1. CHASSIS

■ : BVTP4 × 16 7-685-663-71
▲ : BVTP3 × 12 7-685-648-79



(KV-J14PF2S)

REF.NO.		PART NO.	DESCRIPTION	REMARK
1		X-4037-822-1	BEZNET ASSY	2-7
2		4-061-401-31	DOOR, CONTROL	
3		4-047-464-01	CATCHER, PUSH	
4		4-061-398-01	BUTTON, POWER	
5		4-036-405-11	SPRING, COMPRESSION	
6		4-061-400-01	BUTTON, MULTI	
7	*	4-061-399-01	GUIDE, LIGHT	
8		1-504-305-11	SPEAKER (5X12CM)	
9		4-365-808-12	SCREW (5), TAPPING	
10		4-046-600-11	SPACER, DY	
11	⚠	8-735-562-05	PICTURE TUBE (A34JBU70X)	
12		8-451-418-21	DEFLECTION YOKE (Y14NDA2-(SBN4))	
13		1-452-277-00	MAGNET, BMC	
14	*	A-1332-069-A	C BOARD, COMPLETE	
15		4-376-036-11	SPRING, TENSION	
16	⚠	1-426-145-00	COIL, DEGAUSSING	
17		4-049-416-01	SHEET, BLIND	
18	⚠	X-4035-263-1	COVER ASSY, REAR	
19		4-049-130-01	CLAMPER, CORD	
20	*	4-055-841-01	RAIL (L), GUIDE	
21	*	4-061-294-01	RAIL (R), GUIDE	
22		8-598-323-50	TUNER, VSS BT-AG401	
23	⚠	1-453-249-11	TRANSFORMER ASSY, FLYBACK (NX-1733//M3A)	
24	*	A-1299-233-A	A BOARD, COMPLETE	
25	⚠	4-389-778-11	HOLDER, AC CORD	
26	⚠	1-574-062-11	CORD, POWER (WITH CONNECTOR) 6A 250V	
27		1-452-032-00	MAGNET,DISC	
28		4-051-736-41	PIECE A(90), CONV. CORRECT	
29		4-037-613-01	CUSHION, SP	
30		4-072-569-01	SHEET BLOTTING	
??		4-059-711-01	HOLDER, FBT	



(KV-J51PF2S)

REF.NO.		PART NO.	DESCRIPTION	REMARK
1		4-062-884-61	DOOR, CONTROL	
2		X-4037-823-1	BEZNET ASSY	1, 3-7
3		4-047-464-01	CATCHER, PUSH	
4		4-055-546-21	BUTTON, POWER (KV-J51PN1/J51PN21)	
5		4-036-405-11	SPRING, COMPRESSION	
6		4-060-144-01	BUTTON, MULTI (KV-J51PN1/J51PN21)	
7		4-060-143-01	GUIDE, LIGHT	
8		1-503-902-11	SPEAKER (15 X 6.5 CM)	
9		4-052-433-01	CUSHION, SPEAKER	
10		4-374-745-21	CUSHION (A)	
11		4-302-404-03	SCREW (WASHER HEAD) (+P 4X16)	
12		4-057-862-01	SCREW, TAPPING 5+CROWN WASHER	
13		4-046-600-11	SPACER, DY	
14	*	3-704-372-11	HOLDER, HV CABLE	
15	⚠	8-738-778-05	PICTURE TUBE (A51JUH71X)	
16		8-451-280-81	DEFLECTION YOKE (Y21PXA2-S3)	
17		1-452-277-00	MAGNET, BMC	
18	*	A-1332-068-A	C BOARD, COMPLETE	
19		4-369-318-61	SPRING, TENSION	
20	⚠	1-409-942-11	COIL, DEMAGNETIZATION	
21		4-049-416-01	SHEET, BLIND	
22	⚠	X-4043-787-1	COVER ASSY, REAR	
23		4-049-130-01	CLAMPER, CORD	
24	*	4-055-548-01	GUIDE (L), PWB	
25	*	4-055-549-01	GUIDE (R), PWB	
26		8-598-323-50	TUNER, VSS BT-AG401	
27	⚠	1-900-212-58	LEAD ASSY, FOCUS	
28	⚠	1-453-250-11	TRANSFORMER ASSY, FLYBACK (NX-1746//M3A)	
29	*	A-1299-232-A	A BOARD, COMPLETE	
30	⚠	4-389-778-11	HOLDER, AC CORD	
31	⚠	1-574-062-11	CORD, POWER (WITH CONNECTOR)	
32		1-452-032-00	MAGNET,DISC	
33		1-452-509-51	NECK ASSY, CRT (NA308)	
34	*	A-1342-554-A	VM BOARD, COMPLETE	
35		4-051-736-41	PIECE A (90), CONV, CORRECT	
36		4-072-569-21	SHEET BLOTTING	

SECTION 8
ELECTRICAL PARTS LIST

A

A

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- **Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.**
- **All variable and adjustable resistors have characteristic curve B, unless otherwise noted.**

RESISTORS
- **All resistors are in ohms**
- **F : nonflammable**

CAPACITORS
- **MF : µF, PF : µµF**

COILS
- **MMH : µH, UH : µH**

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION		REMARK
	* A-1299-233-A	A BOARD COMPLETE (KV-J14P2S)		
	* A-1299-232-A	A BOARD COMPLETE (KV-J51PF2S)		
		**********		
	1-533-223-11	CLIP, FUSE		
	4-382-854-11	SCREW (M3X10), P, SW (+)		
		<CAPACITOR>		
C001	1-163-011-11	CERAMIC CHIP	0.0015UF	10.00% 50V
C002	1-126-965-11	ELECT	22UF	20.00% 50V
C004	1-126-961-11	ELECT	2.2UF	20.00% 50V
C006	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C007	1-126-959-11	ELECT	0.47UF	20.00% 50V
C008	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C009	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V
C010	1-163-037-11	CERAMIC CHIP	0.022UF	10.00% 50V
C011	1-104-664-11	ELECT	47UF	20.00% 16V
C013	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C014	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C015	1-101-884-00	CERAMIC	56PF	5.00% 50V
C016	1-101-884-00	CERAMIC	56PF	5.00% 50V
C017	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C018	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C019	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C020	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C021	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C022	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C023	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C024	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C025	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C026	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C027	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C028	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C029	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C034	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C035	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C036	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C037	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C038	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C040	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C042	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C044	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C045	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C046	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C047	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C048	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C049	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C050	1-126-960-11	ELECT	1UF	20.00% 50V
C051	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C052	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C053	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C054	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C055	1-126-925-11	ELECT	470UF	20.00% 10V
C056	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C057	1-163-243-11	CERAMIC CHIP	47PF	5.00% 50V
C058	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C059	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C060	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C061	1-164-505-11	CERAMIC CHIP	2.2UF	16V
C064	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C072	1-126-925-11	ELECT	470UF	20.00% 10V
C074	1-163-001-11	CERAMIC CHIP	220PF	10.00% 50V
C101	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V
C103	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C105	1-104-665-11	ELECT	100UF	20.00% 16V
C106	1-126-964-11	ELECT	10UF	20.00% 50V
C108	1-126-767-11	ELECT	1000UF	20.00% 16V
C109	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V
C111	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C114	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C115	1-163-093-00	CERAMIC CHIP	10PF	5.00% 50V
C116	1-136-165-00	MYLAR	0.1UF	5.00% 50V
C117	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C118	1-126-965-11	ELECT	22UF	20.00% 50V
C119	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V
C120	1-130-493-00	MYLAR	0.068UF	5.00% 50V
C121	1-130-493-00	MYLAR	0.068UF	5.00% 50V
C122	1-104-665-11	ELECT	100UF	20.00% 16V
C124	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C125	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C127	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C128	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C132	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C201	1-164-489-11	CERAMIC CHIP	0.22UF	10.00% 16V
C202	1-164-489-11	CERAMIC CHIP	0.22UF	10.00% 16V
C203	1-126-964-11	ELECT	10UF	20.00% 50V
C204	1-104-665-11	ELECT	100UF	20.00% 16V
C205	1-164-161-11	CERAMIC CHIP	0.0022UF	10.00% 50V
C206	1-164-161-11	CERAMIC CHIP	0.0022UF	10.00% 50V
C207	1-126-961-11	ELECT	2.2UF	20.00% 50V
C208	1-126-961-11	ELECT	2.2UF	20.00% 50V
C209	1-163-024-00	CERAMIC CHIP	0.018UF	10.00% 50V
C210	1-163-037-11	CERAMIC CHIP	0.022UF	10.00% 50V
C213	1-163-024-00	CERAMIC CHIP	0.018UF	10.00% 50V
C214	1-126-961-11	ELECT	2.2UF	20.00% 50V
C215	1-163-037-11	CERAMIC CHIP	0.022UF	10.00% 50V
C216	1-164-489-11	CERAMIC CHIP	0.22UF	10.00% 16V
C217	1-164-489-11	CERAMIC CHIP	0.22UF	10.00% 16V
C218	1-126-961-11	ELECT	2.2UF	20.00% 50V
C220	1-126-965-11	ELECT	22UF	20.00% 50V
C233	1-126-963-11	ELECT	4.7UF	20.00% 50V
C234	1-126-963-11	ELECT	4.7UF	20.00% 50V
C235	1-104-665-11	ELECT	100UF	20.00% 16V
C236	1-104-666-11	ELECT	220UF	20.00% 25V
C237	1-104-665-11	ELECT	100UF	20.00% 16V
C238	1-136-167-00	MYLAR	0.15UF	5.00% 50V
C239	1-104-665-11	ELECT	100UF	20.00% 16V
C240	1-136-167-00	MYLAR	0.15UF	5.00% 50V
C241	1-126-942-61	ELECT	1000UF	20.00% 25V
C242	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V
C243	1-126-964-11	ELECT	10UF	20.00% 50V
C244	1-126-942-61	ELECT	1000UF	20.00% 25V
C246	1-126-964-11	ELECT	10UF	20.00% 50V
C247	1-126-942-61	ELECT	1000UF	20.00% 25V
C252	1-126-961-11	ELECT	2.2UF	20.00% 50V
C253	1-104-665-11	ELECT	100UF	20.00% 16V
C254	1-163-023-00	CERAMIC CHIP	0.015UF	10.00% 50V
C255	1-163-023-00	CERAMIC CHIP	0.015UF	10.00% 50V
C257	1-136-167-00	MYLAR	0.15UF	5.00% 50V
C258	1-136-167-00	MYLAR	0.15UF	5.00% 50V
C300	1-104-664-11	ELECT	47UF	20.00% 16V
C304	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C305	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C306	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C307	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C308	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C309	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C310	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C311	1-163-231-11	CERAMIC CHIP	15PF	5.00% 50V
C312	1-163-231-11	CERAMIC CHIP	15PF	5.00% 50V
C313	1-104-665-11	ELECT	100UF	20.00% 16V
C314	1-164-161-11	CERAMIC CHIP	0.0022UF	10.00% 50V
C315	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V
C316	1-102-125-00	CERAMIC	0.0047UF	10.00% 50V
C319	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C320	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C321	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C322	1-216-295-91	SHORT	0	
C323	1-163-235-11	CERAMIC CHIP	22PF	5.00% 50V
C324	1-164-505-11	CERAMIC CHIP	2.2UF	16V
C325	1-163-093-00	CERAMIC CHIP	10PF	5.00% 50V
C326	1-163-095-00	CERAMIC CHIP	12PF	5.00% 50V
C327	1-163-093-00	CERAMIC CHIP	10PF	5.00% 50V
C328	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C329	1-163-016-00	CERAMIC CHIP	0.0039UF	10.00% 50V
C330	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C331	1-126-964-11	ELECT	10UF	20.00% 50V
C332	1-136-165-00	MYLAR	0.1UF	5.00% 50V
C333	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C334	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V
C335	1-102-973-00	CERAMIC	100PF	5.00% 50V
C336	1-126-964-11	ELECT	10UF	20.00% 50V
C337	1-104-665-11	ELECT	100UF	20.00% 16V
C338	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V
C339	1-163-121-00	CERAMIC CHIP	150PF	5.00% 50V
C340	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V
C341	1-163-117-00	CERAMIC CHIP	100PF	5.00% 50V
C342	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C344	1-126-964-11	ELECT	10UF	20.00% 50V
C349	1-126-964-11	ELECT	10UF	20.00% 50V
C359	1-104-665-11	ELECT	100UF	20.00% 16V
C361	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V
C362	1-163-235-11	CERAMIC CHIP	22PF	5.00% 50V
C367	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C368	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C369	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C370	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C374	1-104-664-11	ELECT	47UF	20.00% 10V
C375	1-104-664-11	ELECT	47UF	20.00% 10V
C376	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V
C402	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V
C403	1-126-965-11	ELECT	22UF	20.00% 50V
C405	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V
C406	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V
C407	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V
C408	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V
C410	1-163-103-00	CERAMIC CHIP	27PF	5.00% 50V
C411	1-163-113-00	CERAMIC CHIP	68PF	5.00% 50V
C413	1-104-665-11	ELECT	100UF	20.00% 16V
C415	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V
C420	1-104-664-11	ELECT	47UF	20.00% 16V
C423	1-163-129-00	CERAMIC CHIP	330PF	5.00% 50V
C501	1-102-228-00	CERAMIC	470PF	10.00% 500V
C523	1-104-665-11	ELECT	100UF	20.00% 16V
C548	1-106-220-00	MYLAR	0.1UF	10.00% 100V
C551	1-126-968-11	ELECT	100UF	20.00% 35V
C552	1-126-968-11	ELECT	100UF	20.00% 35V
C553	1-163-019-00	CERAMIC CHIP	0.0068UF	10.00% 50V
C554	1-102-244-00	CERAMIC	220PF	10.00% 500V
C555	1-101-804-00	CERAMIC	10PF	5.00% 500V
C562	1-104-665-11	ELECT	100UF	20.00% 16V
C602	1-161-830-00	CERAMIC	0.0047UF	99% 500V
C603	1-161-830-00	CERAMIC	0.0047UF	99% 500V
C604	1-117-752-11	ELECT(BLOCK)	330UF	20.00% 450V
C605	1-161-830-00	CERAMIC	0.0047UF	99% 500V
C606	1-161-830-00	CERAMIC	0.0047UF	99% 500V
C607	1-161-830-00	CERAMIC	0.0047UF	99% 500V
C608	1-104-332-11	CERAMIC	470PF	10.00% 2KV
C609	1-123-024-21	ELECT	33UF	160V
C610	1-126-943-11	ELECT	2200UF	20.00% 25V
C611	⚠ 1-117-697-11	CERAMIC	470PF	10.00% 250V
C612	1-102-228-00	CERAMIC	470PF	10.00% 500V
C613	1-102-824-00	CERAMIC	470PF	5.00% 50V
C614	1-126-943-11	ELECT	2200UF	20.00% 25V
C616	1-102-228-00	CERAMIC	470PF	10.00% 500V
C618	1-163-005-11	CERAMIC CHIP	470PF	10.00% 50V
C619	1-162-116-00	CERAMIC	680PF	10.00% 2KV
C621	⚠ 1-104-705-51	MYLAR	0.1UF	20.00% 250V
C622	1-106-383-00	MYLAR	0.047UF	10.00% 200V

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

A

REF. NO.		PART NO.	DESCRIPTION			REMARK
C623		1-126-934-11	ELECT	220UF	20.00%	16V
C624		1-107-884-11	ELECT	1000UF	20.00%	16V
C625		1-102-074-00	CERAMIC	0.001UF	10.00%	50V
C627		1-162-116-00	CERAMIC	680PF	10.00%	2KV
C628		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C630	⚠	1-117-697-11	CERAMIC	470PF	10.00%	250V
C631		1-161-830-00	CERAMIC	0.0047UF	99%	500V
C632	⚠	1-117-697-11	CERAMIC	470PF	10.00%	250V
C633		1-161-754-00	CERAMIC	0.001UF	10.00%	3KV
C634		1-163-005-11	CERAMIC CHIP	470PF	10.00%	50V
C801		1-123-024-21	ELECT	33UF		160V
C802		1-107-364-11	MYLAR	0.01UF	10.00%	200V
C804		1-163-009-11	CERAMIC CHIP	0.001UF	10.00%	50V
C805		1-102-244-00	CERAMIC	220PF	10.00%	500V
C806		1-126-960-11	ELECT	1UF	20.00%	50V
C807		1-136-569-11	FILM	1.2UF	5.00%	200V
C808		1-129-746-00	FILM	0.039UF	5.00%	400V
C809		1-162-115-00	CERAMIC	330PF	10.00%	2KV
C810		1-106-365-00	MYLAR	0.0082UF	99%	200V
C811		1-162-318-11	CERAMIC	0.001UF	10.00%	500V
C812		1-117-646-11	FILM	12000PF	3.00%	1.2KV
C816		1-107-943-11	ELECT	10UF	20.00%	160V
C820		1-161-754-00	CERAMIC	0.001UF	10.00%	2KV
C821		1-104-999-11	MYLAR	0.1UF	10.00%	200V
C822		1-136-111-00	FILM	1UF	5.00%	200V
C823		1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
C825		1-107-364-11	MYLAR	0.01UF	10.00%	200V
C850		1-124-480-11	ELECT	470UF	20.00%	25V
C853		1-162-318-11	CERAMIC	0.001UF	10.00%	500V
C854		1-124-480-11	ELECT	470UF	20.00%	25V
C856		1-162-318-11	CERAMIC	0.001UF	10.00%	500V
C857		1-136-159-00	MYLAR	0.033UF	5.00%	50V
C860		1-102-228-00	CERAMIC	470PF	10.00%	500V
C861		1-107-654-11	ELECT	33UF	20.00%	250V
C875		1-128-562-11	ELECT	47UF	20.00%	100V
C876		1-107-369-11	MYLAR	0.068UF	10.00%	100V
C891		1-163-007-11	CERAMIC CHIP	680PF	10.00%	50V
C898		1-137-150-11	MYLAR	0.01UF	10.00%	100V
C900		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C901		1-163-133-00	CERAMIC CHIP	470PF	5.00%	50V
C1201		1-104-665-11	ELECT	100UF	20.00%	16V
C1202		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C1203		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C1204		1-104-665-11	ELECT	100UF	20.00%	16V
C1205		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C1206		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C1210		1-104-665-11	ELECT	100UF	20.00%	16V
C1212		1-126-960-11	ELECT	1UF	20.00%	50V
C1213		1-126-960-11	ELECT	1UF	20.00%	50V
C1214		1-104-665-11	ELECT	100UF	20.00%	16V
C1215		1-163-123-00	CERAMIC CHIP	180PF	5.00%	50V
C1216		1-164-005-11	CERAMIC CHIP	0.47UF		25V
C1217		1-104-665-11	ELECT	100UF	20.00%	16V
C1218		1-163-123-00	CERAMIC CHIP	180PF	5.00%	50V
C1219		1-104-665-11	ELECT	100UF	20.00%	16V
C1221		1-164-005-11	CERAMIC CHIP	0.47UF		25V
C1222		1-164-005-11	CERAMIC CHIP	0.47UF		25V
C1223		1-164-346-11	CERAMIC CHIP	1UF		16V
C1226		1-126-934-11	ELECT	220UF	20.00%	16V
C1228		1-164-346-11	CERAMIC CHIP	1UF		16V
C1230		1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V
C1259		1-163-019-00	CERAMIC CHIP	0.0068UF	10.00%	50V
C1260		1-163-019-00	CERAMIC CHIP	0.0068UF	10.00%	50V
C1513		1-126-968-11	ELECT	100UF	20.00%	50V

<FILTER>

CF55		1-567-099-00	FILTER, CERAMIC (KV-J14P2S)
CF55		1-767-221-11	FILTER, CERAMIC (KV-J51PF2S)

<CONNECTOR>

CN100	*	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P
CN101	*	1-508-797-00	PIN, CONNECTOR 4P
CN102	*	1-564-506-11	PLUG, CONNECTOR 3P (KV-J51PF2S)
CN103	*	1-564-509-11	PLUG, CONNECTOR 6P
CN111	*	1-564-505-11	PLUG, CONNECTOR 2P (KV-J51PF2S)
CN251	*	1-564-507-11	PLUG, CONNECTOR 4P
CN601	*	1-580-843-11	PIN, CONNECTOR (POWER)
CN602	*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
CN603	*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
CN606		1-695-915-11	TAB (CONTACT) (KV-J51PF2S)
CN609	*	1-564-506-11	PLUG, CONNECTOR 3P (KV-J51PF2S)
CN612		1-695-915-11	TAB (CONTACT) (KV-J51PF2S)
CN613		1-695-915-11	TAB (CONTACT) (KV-J51PF2S)
CN614		1-695-915-11	TAB (CONTACT) (KV-J51PF2S)
CN615		1-695-915-11	TAB (CONTACT) (KV-J51PF2S)
CN851		1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P

<TRIMMER>

CT55		1-404-801-11	TRAP, CERAMIC

<DIODE>

D001		8-719-109-81	DIODE RD4.7ES-T1B
D002		8-719-911-19	DIODE 1SS119-25TD
D003		8-719-041-97	DIODE MA113-(TX)
D005		8-719-109-84	DIODE RD5.1ES-T1B
D008		8-719-109-89	DIODE RD5.6ES-T1B2
D103		8-719-914-42	DIODE DA204K-T-146
D201		8-719-041-97	DIODE MA113-(TX)
D202		1-216-295-91	SHORT 0
D251		8-719-041-97	DIODE MA113-(TX)
D252		8-719-914-42	DIODE DA204K-T-146
D253		8-719-041-97	DIODE MA113-(TX)
D300		8-719-041-97	DIODE MA113-(TX) (KV-J14P2S)
D301		8-719-041-97	DIODE MA113-(TX)
D302		8-719-041-97	DIODE MA113-(TX) (KV-J14P2S)
D304		8-719-041-97	DIODE MA113-(TX) (KV-J14P2S)
D305		8-719-041-97	DIODE MA113-(TX)
D306		8-719-911-19	DIODE 1SS119-25TD
D307		8-719-911-19	DIODE 1SS119-25TD

MC-Service

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION	REMARK
D308	8-719-109-54	DIODE RD2.2ES-T1B	
D310	8-719-041-97	DIODE MA113-(TX)	
D311	8-719-109-54	DIODE RD2.2ES-T1B	
D312	8-719-070-15	DIODE NNCD8.2A-T1	
D315	8-719-070-16	DIODE NNCD9.1A-T1	
D351	8-719-908-03	DIODE GP08DPKG23	
D399	8-719-977-22	DIODE UDZ-TE-17-9.1B	
D403	8-719-911-19	DIODE 1SS119-25TD	
D513	8-719-109-84	DIODE RD5.1ES-T1B	
D551	8-719-908-03	DIODE GP08DPKG23	
D561	8-719-911-19	DIODE 1SS119-25TD	
D591	8-719-911-19	DIODE 1SS119-25TD	
D601	8-719-510-53	DIODE RBV-406H	
D604	8-719-312-10	DIODE RU4AM-T3	
D605	8-719-510-73	DIODE 31DF2-FC5 (KV-J14P2S)	
D605	8-719-067-18	DIODE RN4Z (KV-J51PF2S)	
D606	8-719-510-46	DIODE 31DF2-FC5 (KV-J14P2S)	
D606	8-719-067-18	DIODE RN4Z (KV-J51PF2S)	
D607	8-719-510-47	DIODE ERA92-02-V1	
D609	8-719-510-47	DIODE ERA92-02-V1	
D610	8-719-510-47	DIODE ERA92-02-V1	
D611	8-719-510-47	DIODE ERA92-02-V1	
D801	8-719-945-80	DIODE ERC06-15STP11	
D802	8-719-979-85	DIODE RGP15J-6040G23	
D851	8-719-028-72	DIODE RGP02-17EL-6433 (KV-J14P2S)	
D851	8-719-302-43	DIODE RGP10GPKG23 (KV-J51PF2S)	
D853	8-719-302-43	DIODE RGP10GPKG23	
D855	8-719-302-43	DIODE RGP10GPKG23	
D857	8-719-908-03	DIODE GP08DPKG23	
D858	8-719-908-03	DIODE GP08DPKG23	
D860	8-719-911-19	DIODE 1SS119-25TD	
D901	1-810-039-11	LED UNIT	
D1201	8-719-070-16	DIODE NNCD9.1A-T1	
D1202	8-719-070-16	DIODE NNCD9.1A-T1	
D1203	8-719-070-16	DIODE NNCD9.1A-T1 (KV-J51PF2S)	
D1207	8-719-070-16	DIODE NNCD9.1A-T1	
D1208	8-719-070-16	DIODE NNCD9.1A-T1	
D1209	8-719-070-16	DIODE NNCD9.1A-T1 (KV-J51PF2S)	
D1504	8-719-911-19	DIODE 1SS119-25TD	
D1505	8-719-109-81	DIODE RD4.7ES-T1B	
		<FUSE>	
F601 ⚠	1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V	
		<FERRITE BEAD>	
FB101	1-410-397-21	FERRITE 1.1UH	
FB102	1-410-397-21	FERRITE 1.1UH	
FB103	1-410-397-21	FERRITE 1.1UH	
FB251	1-410-397-21	FERRITE 1.1UH	
FB601	1-410-397-21	FERRITE 1.1UH	
FB603	1-410-397-21	FERRITE 1.1UH	
FB610	1-410-396-41	FERRITE 0.45UH	
FB612	1-410-397-21	FERRITE 1.1UH	
FB801	1-410-397-21	FERRITE 1.1UH (KV-J51PF2S)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<IC>	
IC001	8-752-891-28	IC CXP85220A-058S	
IC002	8-759-805-37	IC L78LR05D-MA	
IC003	8-759-370-34	IC AT24C04A-10PC-B	
IC004	8-742-205-30	HYB IC SBX3081-01(30)	
IC100	8-759-157-40	DIODE HZT33-02TE	
IC201	8-759-476-86	IC TDA7438D013TR	
IC203	8-759-339-60	IC TA8248K	
IC300	8-759-365-26	IC TDA8375A	
IC351	8-759-565-20	IC TDA4665T/V5-118	
IC521	8-759-054-12	IC PQ09RF11	
IC551	8-759-801-98	IC LA7830	
IC601	8-749-014-00	IC STR-S6707N	
IC602	8-749-921-89	IC SE115N	
IC603 ⚠	8-749-010-64	PHOTO COUPLER PC123F2	
IC801	8-759-100-96	IC UPC4558G2-E1	
IC1210	8-759-100-96	IC UPC4558G2-E1	
IC1211	8-759-711-23	IC NJM2234L (KV-J14P2S)	
		<JACK>	
J251	1-770-786-11	JACK	
J1201	1-779-850-11	JACK BLOCK, PIN 6P	
J1202	1-770-329-11	JACK, PIN 3P	
		<CHIP CONDUCTOR>	
JR050	1-216-295-91	SHORT 0	
JR052	1-216-295-91	SHORT 0	
JR101	1-216-295-91	SHORT 0	
JR107	1-216-295-91	SHORT 0	
JR108	1-216-295-91	SHORT 0 (KV-J51PF2S)	
JR111	1-216-295-91	SHORT 0 (KV-J14P2S)	
JR112	8-719-041-97	DIODE MA113-(TX)	
JR113	1-216-295-91	SHORT 0	
JR114	1-208-291-11	RES-CHIP 4.7M 5% 1/10 (KV-J14P2S)	
JR115	1-216-295-91	SHORT 0 (KV-J51PF2S)	
JR116	1-216-295-91	SHORT 0	
JR117	1-216-295-91	SHORT 0	
JR118	1-216-295-91	SHORT 0	
JR124	1-216-295-91	SHORT 0	
JR125	1-216-295-91	SHORT 0	
JR126	1-216-295-91	SHORT 0	
JR179	1-216-295-91	SHORT 0 (KV-J51PF2S)	
JR251	1-216-295-91	SHORT 0	
JR266	1-216-295-91	SHORT 0 (KV-J14P2S)	
		<COIL>	
L001	1-408-591-11	INDUCTOR 1UH	
L002	1-410-509-11	INDUCTOR 10UH	
L003	1-408-605-31	INDUCTOR 15UH	
L101	1-410-470-11	INDUCTOR 10UH	
L301	1-408-602-31	INDUCTOR 8.2UH	
L401	1-410-498-11	INDUCTOR 1.2UH	
L402	1-410-510-11	INDUCTOR 12UH	

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REF. NO.	PART NO.	DESCRIPTION			REMARK
L406	1-410-507-11	INDUCTOR	6.8UH		
L410	1-410-501-11	INDUCTOR	2.2UH		
L802	1-412-527-11	INDUCTOR	15UH		
L804	1-459-075-11	COIL,DYNAMIC CONVERSION CHOKE (KV-J51PF2S)			
L805	1-459-769-13	COIL, HORIZONTAL LINEARITY			
L807	1-459-390-00	INDUCTOR	390UH		
L808	1-412-552-11	INDUCTOR	2.2MH		
L821	1-459-111-00	INDUCTOR	10MH		
L850	1-408-947-00	INDUCTOR	2.2MH		
		<TRANSISTOR>			
Q030	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q108	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q109	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q110	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q202	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX			
Q207	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX			
Q208	8-729-421-19	TRANSISTOR UN2213-TX			
Q209	8-729-424-67	TRANSISTOR UN2216-TX (KV-J51PF2S)			
Q210	8-729-424-67	TRANSISTOR UN2216-TX			
Q301	8-729-421-22	TRANSISTOR UN2211-TX			
Q302	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q303	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q402	8-729-922-66	TRANSISTOR 2SC2410S-TPN			
Q406	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX			
Q408	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q409	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX			
Q414	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q561	8-729-200-17	TRANSISTOR 2SA1091R-TPE2			
Q601	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX (KV-J14P2S)			
Q801	8-729-140-50	TRANSISTOR 2SC3209LK-TP			
Q802	8-729-821-87	TRANSISTOR 2SD1878-CA			
Q821	8-729-209-15	TRANSISTOR 2SD2061-E			
Q902	8-729-421-19	TRANSISTOR UN2213-TX			
Q903	8-729-421-19	TRANSISTOR UN2213-TX			
Q1201	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1202	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1203	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1204	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX			
Q1205	8-729-216-22	TRANSISTOR 2SB709A-QRS-TX (KV-J51PF2S)			
Q1207	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1208	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1209	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q1264	8-729-424-67	TRANSISTOR UN2216-TX (KV-J51PF2S)			
Q1265	8-729-424-67	TRANSISTOR UN2216-TX			
Q1513	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
		<RESISTOR>			
R001	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R002	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R003	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R004	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R007	1-216-073-00	RES-CHIP	10K	5%	1/10W
R008	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R010	1-216-049-91	RES-CHIP	1K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R012	1-216-017-91	RES-CHIP	47	5%	1/10W
R013	1-216-049-91	RES-CHIP	1K	5%	1/10W
R015	1-216-043-91	RES-CHIP	560	5%	1/10W
R016	1-216-049-91	RES-CHIP	1K	5%	1/10W
R017	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R018	1-216-033-00	RES-CHIP	220	5%	1/10W
R019	1-216-101-00	RES-CHIP	150K	5%	1/10W
R021	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R022	1-216-295-91	SHORT	0		
R025	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R026	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R028	1-216-025-91	RES-CHIP	100	5%	1/10W
R029	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R031	1-216-049-91	RES-CHIP	1K	5%	1/10W
R033	1-216-049-91	RES-CHIP	1K	5%	1/10W
R035	1-216-049-91	RES-CHIP	1K	5%	1/10W
R036	1-216-049-91	RES-CHIP	1K	5%	1/10W
R037	1-216-049-91	RES-CHIP (KV-J51PF2S)	1K	5%	1/10W
R038	1-216-033-00	RES-CHIP	220	5%	1/10W
R040	1-216-033-00	RES-CHIP	220	5%	1/10W
R041	1-216-025-91	RES-CHIP	100	5%	1/10W
R042	1-216-039-00	RES-CHIP	390	5%	1/10W
R045	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R047	1-216-025-91	RES-CHIP	100	5%	1/10W
R048	1-216-025-91	RES-CHIP	100	5%	1/10W
R053	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R054	1-216-073-00	RES-CHIP	10K	5%	1/10W
R057	1-216-049-91	RES-CHIP	1K	5%	1/10W
R058	1-216-065-91	RES-CHIP (KV-J51PF2S)	4.7K	5%	1/10W
R060	1-216-037-00	RES-CHIP	330	5%	1/10W
R061	1-216-049-91	RES-CHIP	1K	5%	1/10W
R062	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R063	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R065	1-216-033-00	RES-CHIP (KV-J14P2S)	220	5%	1/10W
R066	1-216-033-00	RES-CHIP (KV-J14P2S)	220	5%	1/10W
R068	1-216-025-91	RES-CHIP	100	5%	1/10W
R071	1-216-037-00	RES-CHIP	330	5%	1/10W
R072	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R076	1-216-025-91	RES-CHIP	100	5%	1/10W
R077	1-216-025-91	RES-CHIP	100	5%	1/10W
R090	1-216-073-00	RES-CHIP	10K	5%	1/10W
R101	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R102	1-216-049-91	RES-CHIP	1K	5%	1/10W
R113	1-216-081-00	RES-CHIP	22K	5%	1/10W
R114	1-216-041-00	RES-CHIP	470	5%	1/10W
R115	1-216-081-00	RES-CHIP	22K	5%	1/10W
R116	1-216-081-00	RES-CHIP	22K	5%	1/10W
R117	1-216-081-00	RES-CHIP	22K	5%	1/10W
R118	1-216-081-00	RES-CHIP	22K	5%	1/10W
R119	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R120	1-216-109-00	RES-CHIP	330K	5%	1/10W
R131	1-216-464-11	METAL OXIDE	18K	5%	2W
R180	1-216-033-00	RES-CHIP	220	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R181	1-216-033-00	RES-CHIP	220	5%	1/10W
R182	1-216-033-00	RES-CHIP	220	5%	1/10W
R203	1-216-033-00	RES-CHIP (KV-J51PF2S)	220	5%	1/10W
R204	1-216-033-00	RES-CHIP (KV-J51PF2S)	220	5%	1/10W
R210	1-216-061-00	RES-CHIP (KV-J51PF2S)	3.3K	5%	1/10W
R211	1-216-061-00	RES-CHIP (KV-J51PF2S)	3.3K	5%	1/10W
R212	1-216-059-00	RES-CHIP (KV-J51PF2S)	2.7K	5%	1/10W
R213	1-216-059-00	RES-CHIP (KV-J51PF2S)	2.7K	5%	1/10W
R240	1-216-035-00	RES-CHIP (KV-J51PF2S)	270	5%	1/10W
R240	1-216-031-00	RES-CHIP (KV-J14P2S)	180	5%	1/10W
R242	1-216-035-00	RES-CHIP (KV-J51PF2S)	270	5%	1/10W
R243	1-216-073-00	RES-CHIP	10K	5%	1/10W
R244	1-216-073-00	RES-CHIP	10K	5%	1/10W
R245	1-216-065-91	RES-CHIP (KV-J51PF2S)	4.7K	5%	1/10W
R245	1-216-075-00	RES-CHIP (KV-J14P2S)	12K	5%	1/10W
R246	1-216-065-91	RES-CHIP (KV-J51PF2S)	4.7K	5%	1/10W
R247	1-216-049-91	RES-CHIP (KV-J51PF2S)	1K	5%	1/10W
R248	1-216-049-91	RES-CHIP (KV-J51PF2S)	1K	5%	1/10W
R248	1-216-071-00	RES-CHIP (KV-J14P2S)	8.2K	5%	1/10W
R249	1-216-049-91	RES-CHIP (KV-J51PF2S)	1K	5%	1/10W
R250	1-216-049-91	RES-CHIP (KV-J51PF2S)	1K	5%	1/10W
R250	1-216-071-00	RES-CHIP (KV-J14P2S)	8.2K	5%	1/10W
R251	1-216-295-91	SHORT	0 (KV-J51PF2S)		
R251	1-216-049-91	RES-CHIP (KV-J14P2S)	1K	5%	1/10W
R252	1-249-411-11	CARBON (KV-J51PF2S)	330	5%	1/4W
R252	1-247-815-91	CARBON (KV-J14P2S)	220	5%	1/4W
R253	1-216-073-00	RES-CHIP	10K	5%	1/10W
R254	1-249-389-11	CARBON	4.7	5%	1/4W
R255	1-249-389-11	CARBON	4.7	5%	1/4W
R256	1-249-411-11	CARBON (KV-J51PF2S)	330	5%	1/4W
R256	1-247-815-91	CARBON (KV-J14P2S)	220	5%	1/4W
R257	8-719-041-97	DIODE MA113-(TX)			
R264	1-216-061-00	RES-CHIP (KV-J51PF2S)	3.3K	5%	1/10W
R265	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R266	1-216-073-00	RES-CHIP	10K	5%	1/10W
R301	1-216-073-00	RES-CHIP (KV-J14P2S)	10K	5%	1/10W
R302	1-216-063-91	RES-CHIP (KV-J14P2S)	3.9K	5%	1/10W
R303	1-216-025-91	RES-CHIP	100	5%	1/10W
R304	1-216-025-91	RES-CHIP	100	5%	1/10W
R305	1-216-025-91	RES-CHIP	100	5%	1/10W
R306	1-216-025-91	RES-CHIP	100	5%	1/10W
R307	1-216-025-91	RES-CHIP	100	5%	1/10W
R308	1-216-033-00	RES-CHIP	220	5%	1/10W
R309	1-216-033-00	RES-CHIP	220	5%	1/10W
R310	1-216-097-91	RES-CHIP	100K	5%	1/10W
R311	1-216-075-00	RES-CHIP	12K	5%	1/10W
R312	1-216-025-91	RES-CHIP	100	5%	1/10W
R313	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R314	1-216-025-91	RES-CHIP	100	5%	1/10W
R315	1-216-295-91	SHORT	0		
R316	1-216-065-91	RES-CHIP (KV-J51PF2S)	4.7K	5%	1/10W
R317	1-216-049-91	RES-CHIP (KV-J51PF2S)	1K	5%	1/10W
R318	1-216-099-00	RES-CHIP	120K	5%	1/10W
R319	1-216-123-11	RES-CHIP	1.2M	5%	1/10W
R320	1-216-083-00	RES-CHIP	27K	5%	1/10W
R321	1-208-820-11	METAL CHIP	39K	0.5%	1/10W
R322	1-216-083-00	RES-CHIP	27K	5%	1/10W
R324	1-216-133-00	RES-CHIP (KV-J14P2S)	3.3M	5%	1/10W
R325	1-216-295-91	SHORT	0		
R326	1-216-039-00	RES-CHIP	390	5%	1/10W
R327	1-216-295-91	SHORT	0		
R328	1-216-295-91	SHORT	0		
R329	1-216-295-91	SHORT	0		
R330	1-216-043-91	RES-CHIP	560	5%	1/10W
R331	1-216-117-00	RES-CHIP	680K	5%	1/10W
R332	1-216-033-00	RES-CHIP	220	5%	1/10W
R333	1-216-077-91	RES-CHIP (KV-J14P2S)	15K	5%	1/10W
R334	1-216-041-00	RES-CHIP (KV-J51PF2S)	470	5%	1/10W
R335	1-216-073-00	RES-CHIP	10K	5%	1/10W
R336	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R338	1-216-295-91	SHORT	0		
R339	1-216-036-00	RES-CHIP	300	5%	1/10W
R340	1-216-035-00	RES-CHIP	270	5%	1/10W
R341	1-216-049-91	RES-CHIP	1K	5%	1/10W
R351	1-216-001-00	RES-CHIP	10	5%	1/10W
R355	1-216-001-00	RES-CHIP	10	5%	1/10W
R356	1-216-049-91	RES-CHIP	1K	5%	1/10W
R360	1-208-291-11	RES-CHIP	4.7M	5%	1/10W
R403	1-216-021-00	RES-CHIP	68	5%	1/10W
R406	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R407	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R408	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R409	1-216-025-91	RES-CHIP	100	5%	1/10W
R414	1-216-041-00	RES-CHIP	470	5%	1/10W
R416	1-216-033-00	RES-CHIP	220	5%	1/10W
R419	1-216-049-91	RES-CHIP	1K	5%	1/10W
R420	1-216-039-00	RES-CHIP	390	5%	1/10W
R421	1-216-033-00	RES-CHIP	220	5%	1/10W
R424	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R425	1-216-039-00	RES-CHIP	390	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R426	1-216-029-00	RES-CHIP	150	5%	1/10W
R429	1-216-031-00	RES-CHIP	180	5%	1/10W
R433	1-216-081-00	RES-CHIP	22K	5%	1/10W
R434	1-216-041-00	RES-CHIP	470	5%	1/10W
R440	1-216-029-00	RES-CHIP	150	5%	1/10W
R521	1-216-049-91	RES-CHIP	1K	5%	1/10W
R552	1-216-101-00	RES-CHIP (KV-J51PF2S)	150K	5%	1/10W
R553	1-216-081-00	RES-CHIP (KV-J51PF2S)	22K	5%	1/10W
R554	1-163-009-11	CERAMIC CHIP (KV-J51PF2S)	0.001UF	10.00%	50V
R555	1-249-429-11	CARBON	10K	5%	1/4W
R556	1-216-049-91	RES-CHIP	1K	5%	1/10W
R557	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R560	1-216-295-91	SHORT	0		
R561	1-249-421-11	CARBON	2.2K	5%	1/4W
R562	1-249-419-11	CARBON	1.5K	5%	1/4W
R563	1-260-126-11	CARBON	180K	5%	1/2W
R564	1-216-091-00	RES-CHIP	56K	5%	1/10W
R565	1-216-091-00	RES-CHIP	56K	5%	1/10W
R566	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R569	1-260-125-11	CARBON	150K	5%	1/2W
R570	1-216-295-91	SHORT	0 (KV-J51PF2S)		
R571	1-216-033-00	RES-CHIP	220	5%	1/10W
R601	1-202-968-11	CEMENTED (KV-J51PF2S)	1.2	5%	10W
R602	1-202-968-11	CEMENTED (KV-J51PF2S)	1.2	5%	10W
R603	1-249-417-11	CARBON (KV-J14P2S)	1K	5%	1/4W
R604	1-249-417-11	CARBON (KV-J14P2S)	1K	5%	1/4W
R606	1-215-915-11	METAL OXIDE (KV-J51PF2S)	470	5%	3W
R610	1-215-924-00	METAL OXIDE	15K	5%	3W
R611	1-202-933-61	FUSIBLE	0.1	10%	1/2W
R612	1-249-377-11	CARBON	0.47	5%	1/4W
R613	1-249-377-11	CARBON	0.47	5%	1/4W
R614	1-215-877-11	METAL OXIDE	22K	5%	1W
R615	1-249-389-11	CARBON	4.7	5%	1/4W
R616	⚠ 1-218-265-91	METAL	8.2M	5%	1W
R617	1-215-924-00	METAL OXIDE	15K	5%	3W
R618	1-249-377-11	CARBON	0.47	5%	1/4W
R619	1-249-377-11	CARBON	0.47	5%	1/4W
R621	1-243-839-11	RES, CEMENT-COATED	47	(KV-J14P2S)	
R622	1-217-192-21	WIREMOUND	0.22	10%	2W
R623	1-247-807-31	CARBON	100	5%	1/4W
R624	1-216-446-00	METAL OXIDE	18	5%	2W
R625	1-249-424-11	CARBON	3.9K	5%	1/4W
R626	1-249-420-11	CARBON	1.8K	5%	1/4W
R627	1-249-417-11	CARBON	1K	5%	1/4W
R628	1-249-417-11	CARBON	1K	5%	1/4W
R629	1-249-399-11	CARBON	33	5%	1/4W
R632	1-249-381-11	CARBON (KV-J51PF2S)	1	5%	1/4W
R636	1-215-924-00	METAL OXIDE	15K	5%	3W
R801	1-215-920-11	METAL OXIDE	3.3K	5%	3W
R802	1-249-385-11	CARBON (KV-J51PF2S)	2.2	5%	1/4W
R803	1-216-057-00	RES-CHIP (KV-J51PF2S)	2.2K	5%	1/10W
R804	1-216-049-91	RES-CHIP	1K	5%	1/10W
R805	1-216-081-00	RES-CHIP	22K	5%	1/10W
R809	1-247-756-11	CARBON	2.2K	5%	1/2W
R811	1-216-343-00	METAL OXIDE	0.33	5%	1W
R812	1-216-075-00	RES-CHIP (KV-J51PF2S)	12K	5%	1/10W
R816	1-249-435-11	CARBON	33K	5%	1/4W
R820	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R821	1-215-911-11	METAL OXIDE	100	5%	3W
R822	1-216-429-00	METAL OXIDE	270	5%	1W
R823	1-249-931-11	CARBON	2.2K	5%	1/4W
R824	1-215-889-00	METAL OXIDE (KV-J14P2S)	330	5%	2W
R825	1-249-392-11	CARBON	8.2	5%	1/4W
R826	1-216-059-00	RES-CHIP (KV-J51PF2S)	2.7K	5%	1/10W
R827	1-216-095-00	RES-CHIP (KV-J51PF2S)	82K	5%	1/10W
R828	1-216-063-91	RES-CHIP (KV-J51PF2S)	3.9K	5%	1/10W
R829	1-216-053-00	RES-CHIP (KV-J51PF2S)	1.5K	5%	1/10W
R829	1-208-782-11	METAL CHIP (KV-J14P2S)	1K	0.5%	1/10W
R831	1-215-886-11	METAL OXIDE (KV-J51PF2S)	100	5%	2W
R831	1-215-887-00	METAL OXIDE (KV-J14P2S)	150	5%	2W
R832	1-216-057-00	RES-CHIP (KV-J51PF2S)	2.2K	5%	1/10W
R834	1-216-073-00	RES-CHIP (KV-J51PF2S)	10K	5%	1/10W
R834	1-216-065-91	RES-CHIP (KV-J14P2S)	4.7K	5%	1/10W
R851	1-249-382-11	CARBON	1.2	5%	1/4W
R852	1-249-417-11	CARBON (KV-J14P2S)	1K	5%	1/4W
R853	1-249-377-11	CARBON	0.47	5%	1/4W
R854	1-249-377-11	CARBON	0.47	5%	1/4W
R855	1-202-818-00	SOLID (KV-J51PF2S)	1K	20%	1/2W
R855	1-260-107-11	CARBON (KV-J14P2S)	4.7K	5%	1/2W
R856	1-249-429-11	CARBON	10K	5%	1/4W
R857	1-249-438-11	CARBON (KV-J51PF2S)	56K	5%	1/4W
R857	1-249-440-11	CARBON (KV-J14P2S)	82K	5%	1/4W
R858	1-216-370-11	METAL OXIDE	1.2	5%	2W
R860	1-247-887-00	CARBON	220K	5%	1/4W
R881	1-216-043-91	RES-CHIP (KV-J51PF2S)	560	5%	1/10W
R882	1-216-059-00	RES-CHIP (KV-J51PF2S)	2.7K	5%	1/10W
R883	1-216-121-91	RES-CHIP (KV-J51PF2S)	1M	5%	1/10W
R883	1-208-827-11	METAL CHIP (KV-J14P2S)	75K	0.5%	1/10W

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R895	1-216-349-00	METAL OXIDE	1	5%	1W
R898	1-249-421-11	CARBON	2.2K	5%	1/4W
R902	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R906	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R907	1-216-043-91	RES-CHIP	560	5%	1/10W
R908	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R909	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R910	1-216-043-91	RES-CHIP	560	5%	1/10W
R911	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R912	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R913	1-216-041-00	RES-CHIP	470	5%	1/10W
R914	1-216-041-00	RES-CHIP	470	5%	1/10W
R1201	1-216-023-00	RES-CHIP	82	5%	1/10W
R1202	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1203	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1204	1-216-089-91	RES-CHIP (KV-J51PF2S)	47K	5%	1/10W
R1205	1-216-023-00	RES-CHIP	82	5%	1/10W
R1206	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1207	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1211	1-216-021-00	RES-CHIP	68	5%	1/10W
R1212	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1213	1-216-049-91	RES-CHIP (KV-J51PF2S)	1K	5%	1/10W
R1214	1-216-113-00	RES-CHIP (KV-J51PF2S)	470K	5%	1/10W Q
R1215	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1216	1-216-113-00	RES-CHIP	470K	5%	1/10W
R1218	1-216-041-00	RES-CHIP	470	5%	1/10W
R1219	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1220	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1221	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1222	1-216-049-91	RES-CHIP (KV-J51PF2S)	1K	5%	1/10W
R1223	1-216-073-00	RES-CHIP (KV-J51PF2S)	10K	5%	1/10W
R1224	1-216-073-00	RES-CHIP (KV-J51PF2S)	10K	5%	1/10W
R1226	1-216-689-11	RES-CHIP (KV-J51PF2S)	39K	5%	1/10W
R1227	1-216-689-11	RES-CHIP	39K	5%	1/10W
R1228	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1229	1-216-041-00	RES-CHIP	470	5%	1/10W
R1230	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1231	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1232	1-216-063-91	RES-CHIP	3.9K	5%	1/10W
R1233	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1234	1-216-088-00	RES-CHIP (KV-J51PF2S)	43K	5%	1/10W
R1235	1-216-088-00	RES-CHIP	43K	5%	1/10W
R1239	1-249-389-11	CARBON	4.7	5%	1/4W
R1240	1-216-025-91	RES-CHIP	100	5%	1/10W
R1241	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1242	1-216-049-91	RES-CHIP (KV-J51PF2S)	1K	5%	1/10W
R1243	1-216-025-91	RES-CHIP	100	5%	1/10W
R1244	1-216-025-91	RES-CHIP (KV-J51PF2S)	100	5%	1/10W
R1245	1-216-037-00	RES-CHIP	330	5%	1/10W
R1246	1-216-037-00	RES-CHIP	330	5%	1/10W
R1247	1-216-041-00	RES-CHIP	470	5%	1/10W
R1248	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R1249	1-216-041-00	RES-CHIP	470	5%	1/10W
R1250	1-216-119-00	RES-CHIP	820K	5%	1/10W
R1251	1-216-119-00	RES-CHIP	820K	5%	1/10W
R1252	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R1253	1-216-060-00	RES-CHIP	3K	5%	1/10W
R1513	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1514	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1515	1-216-025-91	RES-CHIP	100	5%	1/10W

<SWITCH>

S601	⚠	1-571-433-31	SWITCH, PUSH (AC POWER)
S801		1-572-707-11	SWITCH, LEVER
S901		1-571-532-21	SWITCH, TACTIL
S902		1-571-532-21	SWITCH, TACTIL
S903		1-571-532-21	SWITCH, TACTIL
S904		1-571-532-21	SWITCH, TACTIL
S905		1-571-532-21	SWITCH, TACTIL
S906		1-571-532-21	SWITCH, TACTIL

<SPARK GAP>

SG801		1-519-422-11	GAP, SPARK

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SWF401		1-577-169-12	SAWF

<TRANSFORMER>

T601	⚠	1-429-137-21	TRANSFORMER, CONVERTER (SRT)
T605	⚠	1-424-682-11	TRANSFORMER, LINE FILTER
T801		1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE
T851	⚠	1-453-250-11	TRANSFORMER FLYBACK ASSY (NX-1746//M3A)
T851	⚠	1-453-249-11	TRANSFORMER FLYBACK ASSY (NX-1733//M3A)

<THERMISTOR>

THP601	⚠	1-808-059-32	THERMISTOR, POSITIVE (KV-J51PF2S)
THP601	⚠	1-806-165-12	THERMISTOR, POSITIVE (KV-J14P2S)

<TUNER>

TU101		8-598-323-50	VSS TUNER BT-AG401

<CRYSTAL>

X101		1-577-358-21	VIBRATOR, CERAMIC
X300		1-411-752-11	COIL
X358		1-567-505-11	OSCILLATOR, CRYSTAL
X443		1-567-504-11	OSCILLATOR, CRYSTAL

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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

C

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1332-069-A	C BOARD MOUNTED (KV-J14P2S)			
*	A-1332-068-A	C BOARD MOUNTED (KV-J51PF2S)			
		**********			
		<CAPACITOR>			
C701	1-162-114-00	CERAMIC	0.0047UF	2KV	
C702	1-102-074-00	CERAMIC (KV-J51PF2S)	0.001UF	10.00% 50V	
C702	1-136-601-11	FILM (KV-J14P2S)	0.01UF	5.00% 630V	
C703	1-107-651-11	ELECT	4.7UF	20.00% 250V	
C704	1-130-202-00	FILM (KV-J51PF2S)	0.022UF	5.00% 400V	
C704	1-107-651-11	ELECT (KV-J14P2S)	4.7UF	20.00% 250V	
C705	1-102-116-00	CERAMIC (KV-J14P2S)	680PF	10.00% 50V	
C706	1-102-116-00	CERAMIC (KV-J14P2S)	680PF	10.00% 50V	
C707	1-102-117-00	CERAMIC (KV-J14P2S)	820PF	10.00% 50V	
C708	1-102-114-00	CERAMIC (KV-J51PF2S)	470PF	10.00% 50V	
C708	1-102-116-00	CERAMIC (KV-J14P2S)	680PF	10.00% 50V	
C709	1-102-114-00	CERAMIC (KV-J51PF2S)	470PF	10.00% 50V	
C710	1-102-114-00	CERAMIC (KV-J51PF2S)	470PF	10.00% 50V	
C712	1-102-116-00	CERAMIC (KV-J51PF2S)	680PF	10.00% 50V	
C712	1-102-114-00	CERAMIC (KV-J14P2S)	470PF	10.00% 50V	
C713	1-102-116-00	CERAMIC (KV-J51PF2S)	680PF	10.00% 50V	
C713	1-102-115-00	CERAMIC (KV-J14P2S)	560PF	10.00% 50V	
C714	1-102-116-00	CERAMIC	680PF	10.00% 50V	
C716	1-126-933-11	ELECT (KV-J51PF2S)	100UF	20.00% 16V	
C716	1-102-106-00	CERAMIC (KV-J14P2S)	100PF	10.00% 50V	
C717	1-101-880-00	CERAMIC (KV-J51PF2S)	47PF	5.00% 50V	
C736	1-102-114-00	CERAMIC (KV-J51PF2S)	470PF	10.00% 50V	
C737	1-102-114-00	CERAMIC (KV-J51PF2S)	470PF	10.00% 50V	
C746	1-102-114-00	CERAMIC (KV-J51PF2S)	470PF	10.00% 50V	
		<CONNECTOR>			
CN701	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P (KV-J51PF2S)			
CN701	1-695-915-11	TAB (CONTACT) (KV-J14P2S)			
CN703	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN704	1-695-915-11	TAB (CONTACT)			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<DIODE>			
D701	8-719-911-19	DIODE 1SS119-25TD			
D702	8-719-911-19	DIODE 1SS119-25TD			
D703	8-719-911-19	DIODE 1SS119-25TD			
D705	1-102-106-00	CERAMIC (KV-J14P2S)	100PF	10.00% 50V	
D707	8-719-911-19	DIODE 1SS119-25TD (KV-J51PF2S)			
D708	8-719-911-19	DIODE 1SS119-25TD (KV-J51PF2S)			
D709	8-719-911-19	DIODE 1SS119-25TD (KV-J51PF2S)			
D710	8-719-911-19	DIODE 1SS119-25TD (KV-J51PF2S)			
D711	8-719-911-19	DIODE 1SS119-25TD (KV-J51PF2S)			
D712	8-719-911-19	DIODE 1SS119-25TD (KV-J51PF2S)			
D712	8-719-991-33	DIODE 1SS133T-77 (KV-J14P2S)			
D713	8-719-991-33	DIODE 1SS133T-77 (KV-J14P2S)			
D714	8-719-991-33	DIODE 1SS133T-77 (KV-J14P2S)			
D716	8-719-911-19	DIODE 1SS119-25TD (KV-J51PF2S)			
D717	8-719-929-15	DIODE RD9.1ES-T1B (KV-J51PF2S)			
		<JACK>			
J701	⚠ 1-251-388-11	SOCKET, CRT (KV-J51PF2S)			
J701	⚠ 1-251-192-11	SOCKET, CRT (KV-J14P2S)			
		<COIL>			
L701	1-410-667-31	INDUCTOR	22UH		
		<TRANSISTOR>			
Q704	8-729-326-11	TRANSISTOR 2SC2611 (KV-J51PF2S)			
Q704	8-729-326-11	TRANSISTOR 2SC3271-N (KV-J14P2S)			
Q705	8-729-326-11	TRANSISTOR 2SC2611 (KV-J51PF2S)			
Q705	8-729-326-11	TRANSISTOR 2SC3271-N (KV-J14P2S)			
Q706	8-729-326-11	TRANSISTOR 2SC2611 (KV-J51PF2S)			
Q706	8-729-326-11	TRANSISTOR 2SC3271-N (KV-J14P2S)			
Q707	8-729-200-17	TRANSISTOR 2SA1091O-TPE2 (KV-J51PF2S)			
Q708	8-729-200-17	TRANSISTOR 2SA1091O-TPE2 (KV-J51PF2S)			
Q709	8-729-200-17	TRANSISTOR 2SA1091O-TPE2 (KV-J51PF2S)			
Q710	8-729-119-78	TRANSISTOR 2SC2785TP-HFE (KV-J51PF2S)			
Q711	8-729-119-78	TRANSISTOR 2SC2785TP-HFE (KV-J51PF2S)			
Q712	8-729-119-78	TRANSISTOR 2SC2785TP-HFE (KV-J51PF2S)			
		<RESISTOR>			
R701	1-260-133-11	CARBON (KV-J14P2S)	680K	5% 1/2W	
R702	1-260-123-11	CARBON (KV-J14P2S)	100K	5% 1/2W	
R703	1-249-496-11	CARBON (KV-J51PF2S)	100K	5% 1/2W	
R703	1-260-135-11	CARBON (KV-J14P2S)	1M	5% 1/2W	
R705	1-216-393-00	METAL OXIDE (KV-J51PF2S)	2.2	5% 3W	
R705	1-260-079-11	CARBON (KV-J14P2S)	22	5% 1/2W	
R706	1-260-105-11	CARBON (KV-J14P2S)	3.3K	5% 1/2W	

C VM

REF. NO.	PART NO.	DESCRIPTION			REMARK
R707	1-260-105-11	CARBON (KV-J14P2S)	3.3K	5%	1/2W
R708	1-260-105-11	CARBON (KV-J14P2S)	3.3K	5%	1/2W
R709	1-215-899-11	METAL OXIDE (KV-J14P2S)	15K	5%	2W
R710	1-215-922-11	METAL OXIDE (KV-J51PF2S)	6.8K	5%	3W
R711	1-247-762-11	CARBON (KV-J51PF2S)	6.8K	5%	1/2W
R711	1-215-899-11	METAL OXIDE (KV-J14P2S)	15K	5%	2W
R712	1-215-922-11	METAL OXIDE (KV-J51PF2S)	6.8K	5%	3W
R713	1-247-762-11	CARBON (KV-J51PF2S)	6.8K	5%	1/2W
R713	1-215-899-11	METAL OXIDE (KV-J14P2S)	15K	5%	2W
R714	1-215-922-11	METAL OXIDE (KV-J51PF2S)	6.8K	5%	3W
R714	1-247-807-31	CARBON (KV-J14P2S)	100	5%	1/4W
R715	1-247-762-11	CARBON (KV-J51PF2S)	6.8K	5%	1/2W
R717	1-215-409-00	METAL (KV-J14P2S)	330	1%	1/4W
R718	1-249-409-11	CARBON (KV-J14P2S)	220	5%	1/4W
R719	1-215-480-00	METAL (KV-J51PF2S)	300K	1%	1/4W
R719	1-247-807-31	CARBON (KV-J14P2S)	100	5%	1/4W
R720	1-249-923-11	CARBON (KV-J51PF2S)	1K	5%	1/4W
R720	1-216-346-00	METAL OXIDE (KV-J14P2S)	0.56	5%	1W
R721	1-215-489-00	METAL (KV-J51PF2S)	680K	1%	1/4W
R722	1-249-923-11	CARBON (KV-J51PF2S)	1K	5%	1/4W
R722	1-215-411-00	METAL (KV-J14P2S)	390	1%	1/4W
R723	1-215-479-00	METAL (KV-J51PF2S)	270K	1%	1/4W
R724	1-249-923-11	CARBON (KV-J51PF2S)	1K	5%	1/4W
R725	1-249-419-11	CARBON (KV-J51PF2S)	1.5K	5%	1/4W
R725	1-249-409-11	CARBON (KV-J14P2S)	220	5%	1/4W
R726	1-249-419-11	CARBON (KV-J51PF2S)	1.5K	5%	1/4W
R726	1-215-479-00	METAL (KV-J14P2S)	270K	1%	1/4W
R727	1-249-419-11	CARBON (KV-J51PF2S)	1.5K	5%	1/4W
R727	1-215-487-00	METAL (KV-J14P2S)	560K	1%	1/4W
R728	1-249-407-11	CARBON (KV-J51PF2S)	150	5%	1/4W
R728	1-215-479-00	METAL (KV-J14P2S)	270K	1%	1/4W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R729	1-249-408-11	CARBON (KV-J51PF2S)	180	5%	1/4W
R730	1-249-408-11	CARBON (KV-J51PF2S)	180	5%	1/4W
R730	1-247-807-31	CARBON (KV-J14P2S)	100	5%	1/4W
R731	1-249-399-11	CARBON (KV-J51PF2S)	33	5%	1/4W
R731	1-249-409-11	CARBON (KV-J14P2S)	220	5%	1/4W
R732	1-249-399-11	CARBON (KV-J51PF2S)	33	5%	1/4W
R732	1-215-411-00	METAL (KV-J14P2S)	390	1%	1/4W
R733	1-249-399-11	CARBON (KV-J51PF2S)	33	5%	1/4W
R733	1-247-791-91	CARBON (KV-J14P2S)	22	5%	1/4W
R734	1-247-739-11	CARBON (KV-J51PF2S)	100	5%	1/2W
R734	1-247-791-91	CARBON (KV-J14P2S)	22	5%	1/4W
R735	1-247-791-91	CARBON (KV-J14P2S)	22	5%	1/4W
R738	1-247-807-31	CARBON (KV-J51PF2S)	100	5%	1/4W
R739	1-247-807-31	CARBON (KV-J51PF2S)	100	5%	1/4W
R740	1-247-807-31	CARBON (KV-J51PF2S)	100	5%	1/4W
R749	1-249-424-11	CARBON (KV-J14P2S)	3.9K	5%	1/4W
R750	1-249-424-11	CARBON (KV-J14P2S)	3.9K	5%	1/4W
R751	1-249-424-11	CARBON (KV-J14P2S)	3.9K	5%	1/4W
R755	1-249-418-11	CARBON (KV-J51PF2S)	1.2K	5%	1/4W
R756	1-249-418-11	CARBON (KV-J51PF2S)	1.2K	5%	1/4W
R757	1-249-418-11	CARBON (KV-J51PF2S)	1.2K	5%	1/4W

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*	A-1342-554-A	VM BOARD MOUNTED (KV-J51PF2S ONLY) **********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C1722	1-102-115-00	CERAMIC	560PF	10.00%	50V
C1724	1-102-961-00	CERAMIC	27PF	5.00%	50V
C1751	1-136-153-00	MYLAR	0.01UF	5.00%	50V
C1761	1-161-830-00	CERAMIC	0.0047UF		500V
C1763	1-107-638-11	ELECT	33UF	20.00%	160V
C1764	1-126-933-11	ELECT	100UF	20.00%	16V
C1768	1-106-383-00	MYLAR	0.047UF	10.00%	200V
C1769	1-107-667-11	ELECT	2.2UF	20.00%	160V

VM

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1770	1-104-999-11	MYLAR	0.1UF	10.00%	200V
C1771	1-126-964-11	ELECT	10UF	20.00%	50V
C1772	1-126-933-11	ELECT	100UF	20.00%	16V
C1773	1-106-383-00	MYLAR	0.047UF	10.00%	200V
C1775	1-126-933-11	ELECT	100UF	20.00%	16V
C1776	1-126-964-11	ELECT	10UF	20.00%	50V
C1778	1-130-471-00	MYLAR	0.001UF	5.00%	50V
C1779	1-130-471-00	MYLAR	0.001UF	5.00%	50V
C1780	1-126-964-11	ELECT	10UF	20.00%	50V
		<CONNECTOR>			
CN1701*	1-564-511-61	PLUG, CONNECTOR 8P			
		<DIODE>			
D1761	8-719-911-19	DIODE 1SS119-25TD			
D1763	8-719-911-19	DIODE 1SS119-25TD			
D1764	8-719-911-19	DIODE 1SS119-25TD			
D1767	8-719-110-88	DIODE RD39ES-T1B			
D1768	8-719-110-88	DIODE RD39ES-T1B			
		<COIL>			
L1721	1-414-191-11	INDUCTOR	150UH		
L1722	1-408-621-31	INDUCTOR	330UH		
L1723	1-414-182-11	INDUCTOR	6.8UH		
L1761	1-410-478-11	INDUCTOR	47UH		
L1762	1-408-610-31	INDUCTOR	39UH		
		<TRANSISTOR>			
Q1722	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q1723	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q1756	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q1761	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q1762	8-729-119-76	TRANSISTOR 2SA1309A-QTA			
Q1763	8-729-017-05	TRANSISTOR 2SA1837			
Q1764	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q1765	8-729-017-06	TRANSISTOR 2SC4793			
Q1766	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q1767	8-729-142-86	TRANSISTOR 2SC3733-T			
Q1777	8-729-326-11	TRANSISTOR 2SC2611			
		<RESISTOR>			
R1721	1-249-414-11	CARBON	560	5%	1/4W
R1722	1-249-412-11	CARBON	390	5%	1/4W
R1723	1-249-407-11	CARBON	150	5%	1/4W
R1724	1-249-407-11	CARBON	150	5%	1/4W
R1725	1-249-412-11	CARBON	390	5%	1/4W
R1727	1-247-843-11	CARBON	3.3K	5%	1/4W
R1728	1-249-429-11	CARBON	10K	5%	1/4W
R1732	1-126-964-11	ELECT	10UF	20.00%	50V
R1736	1-249-419-11	CARBON	1.5K	5%	1/4W
R1753	1-249-430-11	CARBON	12K	5%	1/4W
R1762	1-247-815-91	CARBON	220	5%	1/4W
R1764	1-247-734-11	CARBON	39	5%	1/2W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1765	1-249-414-11	CARBON	560	5%	1/4W
R1766	1-249-418-11	CARBON	1.2K	5%	1/4W
R1768	1-249-421-11	CARBON	2.2K	5%	1/4W
R1769	1-249-384-11	CARBON	1.8	5%	1/4W
R1770	1-249-435-11	CARBON	33K	5%	1/4W
R1772	1-249-432-11	CARBON	18K	5%	1/4W
R1774	1-215-912-11	METAL OXIDE	150	5%	3W
R1775	1-249-417-11	CARBON	1K	5%	1/4W
R1776	1-249-432-11	CARBON	18K	5%	1/4W
R1777	1-249-438-11	CARBON	56K	5%	1/4W
R1778	1-249-430-11	CARBON	12K	5%	1/4W
R1779	1-249-414-11	CARBON	560	5%	1/4W
R1780	1-249-418-11	CARBON	1.2K	5%	1/4W
R1781	1-249-410-11	CARBON	270	5%	1/4W
R1782	1-249-384-11	CARBON	1.8	5%	1/4W
R1784	1-247-807-31	CARBON	100	5%	1/4W
R1785	1-249-400-11	CARBON	39	5%	1/4W
R1786	1-249-435-11	CARBON	33K	5%	1/4W
R1787	1-249-428-11	CARBON	8.2K	5%	1/4W
R1788	1-249-419-11	CARBON	1.5K	5%	1/4W
R1789	1-249-413-11	CARBON	470	5%	1/4W
R1790	1-216-451-11	METAL OXIDE	120	5%	2W
R1791	1-249-411-11	CARBON	330	5%	1/4W
R1812	1-249-425-11	CARBON	4.7K	5%	1/4W
R1851	1-249-393-11	CARBON	10	5%	1/4W

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MISCELLANEOUS
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	1-501-372-81	ANTENNA, TELESCOPIC
	1-417-151-21	MATCHING TRANSFORMER, ANTENNA
⚠	1-409-942-11	COIL, DEMAGNETIZATION (KV-J51PF2S)
⚠	1-426-145-71	COIL, DEMAGNETIZATION (KV-J14P2S)
	1-452-032-00	MAGNET,DISC
	1-452-277-00	MAGNET, BMC
	1-503-902-11	SPEAKER (15X6.5 CM) (KV-J51PF2S)
	1-504-305-11	SPEAKER (5 X 12 CM) (KV-J14P2S)
⚠	1-574-062-11	CORD, POWER (WITH CONNECTOR) 2.5A/250V
	1-452-509-51	NECK ASSY, CRT (NA 308) (KV-J51PF2S ONLY)
	8-451-280-81	DEFLECTION YOKE (Y21PXA2) (KV-J51PF2S)
	8-451-418-21	DEFLECTION YOKE (Y21PXA2) (KV-J14P2S)
⚠	8-738-778-05	PICTURE TUBE (A51JUH71X) (KV-J51PF2S)
⚠	8-735-562-05	PICTURE TUBE (A34JBU70X) (KV-J14P2S)

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ACCESSORIES AND PACKING MATERIALS
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4-076-810-01	INDIVIDUAL CARTON (KV-J51PF2S)
4-076-794-01	INDIVIDUAL CARTON (KV-J14P2S)
4-076-795-01	CUSHION (UPPER) (ASSY) (KV-J14P2S)
4-076-797-01	CUSHION (RIGHT UPPER) (KV-J14P2S)
4-076-798-01	CUSHION (LEFT UPPER) (KV-J14P2S)

MC-Service

REF. NO.	PART NO.	DESCRIPTION	REMARK
	4-076-796-01	CUSHION (LOWER) (ASSY) (KV-J14P2S)	
	4-076-799-01	CUSHION (RIGHT LOWER) (KV-J14P2S)	
	4-076-800-01	CUSHION (LEFT LOWER) (KV-J14P2S)	
	4-076-811-01	CUSHION (UPPER) (ASSY) (KV-J51PF2S)	
	4-076-813-01	CUSHION (RIGHT UPPER) (KV-J51PF2S)	
	4-076-814-01	CUSHION (LEFT UPPER) (KV-J51PF2S)	
	4-076-812-01	CUSHION (LOWER) (ASSY) (KV-J51PF2S)	
	4-076-815-01	CUSHION (RIGHT LOWER) (KV-J51PF2S)	
	4-076-816-01	CUSHION (LEFT LOWER) (KV-J51PF2S)	
*	4-055-210-11	BAG, PROTECTION (KV-J51PF2S)	
*	4-392-859-01	BAG, PROTECTION (KV-J14P2S)	
	4-076-667-11	MANUAL, INSTRUCTION	

REF. NO.	PART NO.	DESCRIPTION	REMARK
	4-076-858-01	LEAFLET	
	4-392-003-41	BAND, HOLD (KV-J51PF2S)	
	4-392-004-31	CLIP (KV-J51PF2S)	
**********			
		REMOTE COMMANDER	
		**********	
	1-475-358-11	REMOTE COMMANDER (RM-869)	
	9-939-697-01	BATTERY COVER REMOTE COMMANDER (RM-869)	

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